ENVELOPE - 1

TENDER DOCUMENT

TECHNICAL BID

FOR

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN BUILDING AT PLOT WITH OLD SURVEY NO. 31/1, VILLAGE-BORKHET, P.O. GODALVIHIR, TEHSIL-AHWA, DISTRICT-DANG, GUJARAT, INDIA

Tender will be addressed to Bank of Baroda, Regional office, Valsad Region, 1st Floor, Mahalaxmi Tower, Tithal Road, Valsad-396001, Gujarat, India.

Tenders will be submitted to the following address

CLIENT: -

BANK OF BARODA, REGIONAL OFFICE, VALSAD REGION, 1st FLOOR MAHALAXMI TOWER, TITHAL ROAD, VALSAD-396001, INDIA

ARCHITECT: -

M/S.SHYAMAL GANDHI & ASSOCIATES

ARCHITECTS / INTERIOR DESIGNERS / PLANNER

21, VIRNAGAR SOC. OPP. I.D.B.I. BANK,

BHIMJIPURA, NEW WADAJ, AHMEDABAD-380013

(m) 9016310164 e-mail – sgassociate21@gmail.com

LAST DATE OF SUBMISSION OF TENDER: - 31/01/2025 BEFORE 15:00 Hrs. DATE OF PRE-BID MEETING: - 18/01/2025 BEFORE 14:00 Hrs. DATE OF TENDER OPENING: - 31/01/2025 at 15,30 Hrs.

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1. NOTICE INVITING TENDER

WORK: CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN BUILDING AT PLOT WITH OLD SURVEY NO. 31/1, VILLAGE-BORKHET, P.O. GODALVIHIR, TEHSILAHWA, DISTRICT-DANG, GUJARAT, INDIA.

Sir/Madam,

1. Sealed tenders are invited for the proposed work by the

Bank of Baroda, Regional Office, Valsad Region, 1st Floor, Mahalaxmi Tower, Tithal Road, Valsad - 3960001, GUJARAT, INDIA.

- 2. Sealed tenders in the prescribed form on two separate envelopes should be addressed to THE REGIONAL HEAD, BANK OF BARODA, REGIONAL OFFICE, VALSAD REGION, 1ST FLOOR, MAHALAXMI TOWER, TITHAL ROAD, VALSAD-396001, GUJARAT, INDIA. & super scribed Construction of Baroda Swarojgar Vikas Sansthan (RSETI) BUILDING at Plot with OLD SURVEY NO. 31/1, VILLAGE BORKHET, P.O. GODALVIHIR, TEHSIL- AHWA, DISTRICT DANG, GUJARAT, INDIA.
 - a. Envelope No.1: To contain contractor's terms and CONDITIONS, work orders, Performance/completion certificates, all required papers as required in basic information technical assumptions along with Demand Draft/BANKER's CHEQUE for Rs.2,57,000/- (Rupees two lakes fifty seven thousand only) in favor of Bank of Baroda, Regional office, Valsad as E.M.D issued during tender notice period of period from 10/01/2025 to 31/01/2025 WILL only be accepted subjected to the submission of the bids within the prescribed time of submission.
 - b. Envelop No 2: Price Bid Tender documents along with B.O.Q Completed in all respect and duly signed and submitted to, THE REGIONAL HEAD, BANK OF BARODA, REGIONAL OFFICE, VALSAD REGION, 1ST FLOOR, MAHALAXMI TOWER, TITHAL ROAD, VALSAD 396001, GUJARAT, INDIA on 31/01/2025 up to 3:00 P.M. Envelope 1 will be opened on the 31/01/2025 at 03.30 P.M. in the presence of the Contractors or their representatives. No separate information will be given in this regard. Envelope No 2 may be opened at a later date, which will be communicated to the tenderers in advance. In case of holidays/strikes/bands or any reason causing a holiday exactly on the last date of submission of offers; the last date of submission will be shifted to immediate next working day. EMD will strictly not to be kept in Envelope 2 or else the tender will be considered as rejected.
- 3. The tenderer must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of filling this tender and for entering into a Contract for the execution of the same and must examine the drawings and inspect the site of the work and acquaint himself with all local conditions and matters pertaining thereto.
- 4. Each of the tender documents is required to be signed by the person or persons submitting the tender in token of his / their having acquainted themselves with the General Conditions etc as laid down. Any tender with any of the documents not signed shall be rejected.

- 5. The tender documents must be filled in English and all the entries must be made properly & clearly by the hand and written in ink. If any of the documents are missing or un- signed, the tender shall be considered invalid.
- 6. All erasures and alterations made while filling the tender must be attested by the initial of the tenderer. Overwriting of figures is not permitted. Failure to comply with either of these conditions will render the tender void. No advice or any change in rate or conditions after submission of the tender will be entertained. All the rates should be quoted both in figures and words. If on check there are differences between the rates given by the contractor, in words and figure or in amount workout by the contractor, the following procedure shall be followed.
- i) When there is a difference between the rate in figures and in words, the rate which corresponds to the amount worked out by the Contractor, shall be taken as correct.
- ii) When the amount of an item is not worked out by the contractor or it does not correspond with the rate written either in figures or in words, then the rate quoted by the contractor in words shall be taken as correct.
- iii) When the rate quoted by the contractor in figures and words tallies but the amount is not worked out correctly, the rate quoted by the contractor shall be taken as correct and not the amount.
- 7. In case of the rates/ amount quoted by the bidder exceeds the estimated cost/ estimated item rates, bank shall have the right for obtaining detailed rate analysis for such item/ items (i.e. material cost with quantity + labor cost with quantity + profit) which necessarily needs to be compatible with market rates for acceptance of the tender/ bid or else Bank shall be at liberty to reject such tender/ bid and no claim shall be entertained by Bank.
- 8. The intending tenderer shall deposit EMD by DD / BC drawn in favor of Bank of Baroda, Regional Office, Baroda City Region, Vadodara of Rs.2,57,000 (Rupees two lakhs fifty-seven thousand only) as the Earnest Money as guarantee of good faith, which amount shall be forfeited as liquidated damages in the event of any evasive/ refusal or delay in signing the contract. The deposit of the unsuccessful tender will be returned without interest immediately after a decision is taken regarding the award of the Contract. The Earnest Money of the successful tender will be adjusted towards Security Deposit. A tender not accompanied by Earnest Money Deposit will not be considered. No concession will be made to public Sector companies from Payment of Earnest Money Deposit.
- 9. The successful tender will have to pay as the amount of initial security deposit which shall be 2% of the accepted value of the tender including the EMD, by means of D.D in favor of the Bank of Baroda, Regional Office, Valsad Region payable at Valsad. The initial security deposit is to be paid by the Contractor to Bank within -7- days of intimation to him of the acceptance of the tender. The initial security deposit will be invested with the bank for the duration of the contract period i.e. -7- months and will be refunded to the contractor without any interest, after issue of the virtual completion certificate. No interest is allowed on the retention money.
- 10. Retention of 8% of the value of the work done from every running bill will be deducted till total retention including EMD and SD paid earlier, becomes 5% of the contract value, and shall be held by the Bank as Total Retention amount. On the Architect's certifying to the completion of the work, 50% of total security deposit shall be released to the contractor with the final certificate of payment and the balance payment will be retained for a further period of TWELVE months after the completion certificate is issued by the Architects and agreed by the Bank.

- 11. Within one week of the receipt of intimation from Architects of the acceptance of his / their tender, the successful tenderer shall be bound to implement the contract by signing an agreement in accordance with the Agreement and Conditions of Contract attached herewith, but the work order or the written acceptance by the Employer of a tender will constitute a binding agreement between the Employer and the person tendering whether such formal Contract is or not subsequently entered into.
- 12. All compensation or other sums of money payable by the Contractor to our Clients under the terms of this contract may be deducted from the security Deposit, or from any sum that may be or may become due to the Contractor on any account whatsoever and in the event of the Security Deposit being reduced by reasons of any such deductions, the Contractor shall within 15 days of being asked to do make good in cash or by cheque any sum which have been deducted from his security deposit.
- 13. The contractor shall arrange for the procurement of all the materials at site as required and directed, and store them in his go down at the site of construction and also bear all the expenses incurred in therewith payment of taxes, octroi, loading/unloading of material to the site, any local tax, cess etc.
- 14. The rates quoted by the Contractor shall include all eventualities such as heavy rain, sudden floods etc. which cause damage to the executed work, or which may may totally wash out the work. Until the completion certificate is issued to the Contracts, our clients will not be responsible for such damage or wash out of the construction work.
- 15. Time is the essence of the contract. The work should be completed in -7-months including monsoon from the date of the work order issued to the contractor to commence the work. The successful Contractor will have to give a CPM/PERT chart of various activities of work to be done so that the work gets completed within the stipulated time. The chart showing the item wise/location wise/floor wise progress which he (the contractor) intends to make to enable him to conveniently and practicably complete the work in all respects within the agreed time as per contract. The chart will be scrutinized and approved by the Architects with suitable modifications, as and if necessary and the approved chart will then form part of the agreement, being the basis for assessment of progress under the relevant conditions of contract shall be submitted within 7 days from the date of acceptance of the tender. The chart may from time to time during the progress of the work be reviewed and modified with the approval of the Architects keeping in view the agreed date of completion.
- 16. If the contractor fails to complete the work by the Scheduled date of completion or within any sanctioned extended time, he will have to pay liquidated damages at 1% of estimated amount for each week beyond the date that the work remains incomplete subject to maximum of 10% of the contract value.
- 17. The quantities contained in the Schedule are only approximate. The work as carried out and done will be measured up from time to time, for which payment will be made subject to the terms and conditions of the contract.
- 18. The unit price shall be deemed to be fixed price. In case of extra items, a record of labor charges paid shall be maintained and shall be presented regularly to the Architects for checking. The settlement will be made based on figures arrived at jointly and taking unit price given in the contract assigned to the successful Tenderer. In the case of extra items where similar or comparable items are quoted in the tender, extra rates shall be based on tender rates.
- 19. Bank of Baroda, Vadodara do not bind themselves to accept the lowest or any tender and reserve to themselves the right to accept or reject any or all tenders either in whole or in part, without assigning any reason for doing so.

- 20. No employee of the Bank is allowed to work as a Contractor for a period of 2 years of his / her retirement from Bank Services without previous permission of the Bank. This contract is liable to be cancelled, if either the contractor or any of his employee is found any time to be such a person who had not obtained the permission of Bank as aforesaid before submission of the tender or engagement in the contractor's service.
- 21. The work Architect or any reference with architect may be read null and void in the present contract / agreement if architect is not employed in the project. Bank of Baroda, Regional Office, Valsad Region will act as architect if so specified.

PRE-QUALIFICATION CRITERIA:

CONTRACTOR/AGENCY/FIRM WHO ARE DESIROUS OF TENDERING FOR ABOVE WORK AND FULFILLS FOLLOWING MINIMUM REQUIREMENTS ONLY NEED TO APPLY

 i. a) The contractors/Firms should have carried out a minimum of one work of similar nature successfully completed, each work valued at not less than Rs.205 Lakhs during the last 7 years from date of publication.

OR

ii. (b) 2 works of similar nature successfully completed valued at an amount not less than Rs. 128 Lakhs during the last 7 years from date of publication.

OR

iii. (c) 3 works of similar nature successfully completed of value not less than Rs.102 Lakhs during the last 7 years from date of publication.

The average annual turnover of the contractor during the last three year ending 31-03-2024 should not be less than Rs.80 Lakhs

*Similar Job: Construction of commercial / administrative / Institutional buildings.

The agency bidding for this job should have full-fledged office preferably in Gujarat and expertise in construction field,

The firm should have enough experienced personnel, technical know-how, and other resources for the completion of subject work.

- 1. APPLICATIONS BY THOSE FIRMS WHO DO NOT SUBMIT PERFORMANCE CERTIFICATES/COMPLETION CERTIFICATE & WORK ORDERS FROM THEIR PREVIOUS EMPLOYERS / CLIENTS ARE LIABLE FOR REJECTION. FOR certificates, the issuing authority shall not be less than an Executive In charge. Bank may obtain confidential reports of the bidders for the similar jobs which have to be satisfactory for technical pre— qualification of the bidder. Any relevant information/document/credential found false at a later stage shall lead to the cancellation of contract irrespective of any stage of contract/work, without entertaining any claim.
- 2. BIDDERS ON WHOM BANK HAS IMPOSED PENALTY FOR THEIR PREVIOUS WORKS IN PAST -2- YEARS ARE NOT ELIGIBLE TO APPLY. THOSE TENDERS WILL BE REJECTED WITHOUT ANY INTIMATION.

Bank of Baroda Regional Office Valsad Valsad Region, 1st floor Mahalaxmi Tower, Tithal Road, Valsad – 396 001.

Basic Information

1	Name of the applicant / Organization	
	Address of the Registered Office	
	Address of office	
	(With Phone Nos Fax Nos & Email ID & Contact Person)	
2	Year of establishment	
3	Type of organization (Whether sole proprietorship, Partnership, Private Ltd. or Ltd. Co. etc.)	
	(Enclose certified copies of documents as evidence)	
4	Name & qualification of the Proprietor / Partners / Directors of the Organization / Firm	
	a)	
	b)	
	c)	

	Enclose certified copies of document as evidence	
5	Whether registered with Government / Semi – Government / Municipal Authorities of any other Public Organization and if so, in which class and since when? (Enclose certified copies of document as evidence)	
6	No. of years of experience in the field and details of work in any other field.	
	Whether ISO certified, furnish the details.	
7	Area of business activities other than construction, if any, and place of business.	
8	Address of business activities other than construction if any, and place of business	
9	Address of the registered/office through which the proposed work of the Bank will be handled and the Name & Designation of officer in charge. (ENCLOSE ADDRESS PROOF)	
	Work Completion Details (Proforma – 1)
	a. Three similar completed works each costing not less than Rs.102 Lakhs	
	OR	
	b. Two similar completed works each	

	costing not less than Rs.128 Lakhs	
	OR	
	c. One similar completed work costing not less than Rs. 205 Lakhs	
	(Enclose work completion certificate from client)	
11	[a] Yearly turnover of the organization during last 3 years (year wise) and furnish audited balance sheet and Profit & Loss A/c (Audited) for the last –3- years.	
	[b] Committed turnover in	
	2021 – 2022	
	2022 – 2023	
	2023– 2024	
13	Enclose copy of latest income tax clearance certificate (last 3 years)	Yes/No
	(ENCLOSE COPY)	
14	PAN No.	Yes/No
	(ENCLOSE COPY PAN CARD)	
15	GST No.	Yes/No
	(ENCLOSE COPY OF REGISTRATION)	
16	Other infrastructural information to be used/ referred for this project (Proforma-4)	
	List of available plants, machineries equipment etc.	

17	Furnish the names of –3- responsible persons along with their designation, address, Tel. No., etc., for whose organization, you have completed the above-mentioned jobs and who will be in a position to certify about the performance of your organization.	 2. 3.
18	Whether any Civil Suit / litigation arisen in contracts executed / being executed during the last 10 years. If yes, please furnish the name of the project, employer, Nature of work, Contract value, work order and brief details of litigation. Give name of court, place, and status of pending litigation.	Attach separate sheet required (if yes).
19	Information relating to whether any litigation is pending before any Arbitrator for adjudication of any litigation or else any litigation was disposed off during the last ten years by an arbitrator. If so, the details of such litigation are required to be submitted.	
20	No. of supplementary sheets attached	

NOTE: Attach extra sheets with Sr. No if the space found less.

LIST OF SIMILAR PROJECTS EXECUTED BY THE CONTRACTOR/FIRM COSTING NOT LESS THAN 102 LAKHS DURING THE LAST 7 YEARS ENDING AS ON DATE OF PUBLICATION.

Notes: Information has to be filled up specifically in this format. Date shall be reckoned from

SI No	Name of work/ project with address	Name & full postal address of the owner. Specify	Contract Amount (Rs.)	Stipulated time of completion (Years)	Actual time of completion (years)	Any other relevant information. Actual amount of the Project, if increased, give reasons.	Enclose client's certificate for satisfactory completion.
1	2	3	4	5	6	7	8

The date of advertisement of the notice in newspapers.

For certificates, the issuing authority shall not be less than an Executive In charge.

Performance/Completion certificates will necessarily be submitted along with Work Orders.

LIST OF IMPORTANT WORKS OF SIMILAR NATURE ON HAND.

(EACH WORKS COSTING NOT LESS THAN RS.102 LAKHS)

SI no	Name of work/ project with address	Name & full postal address of the owner. Specify whether Govt. undertaking along with name, address and contact nos. of -2-persons (Engineers or top officials of the organization)	Contract Amount (Rs.) (for construction work only) with copy of Work Order & completion certificate from project in- charge.	Stipulated time of completion (Years)	Present status of the project	Any other relevant information
1	2	3	4	5	6	7

Note:-

Information must be filled up specifically in this format

	DETAILS OF KEY PERSONNEL, GIVING DETAILS ABOUT THEIR TECHNICAL QUALIFICATION & EXPERIENCE INCLUDING THEIR IN-HOUSE ESTABLISHMENT.								
Sr N o		Name and design ation	Age	Qualific ation	Experien ce	Nature e of works handled	Name of the projects handled costing over 40% of est. cost	Date form, which employe d in your organiza tion	Indicate details of experienc e for similar projects
1		2	3	4	5	6	7	8	9
1	Details of qualified in- house Civil Engineers with detail of experience in similar works						<u>'</u>		
2	Details of in- house qualified water supply and Sanitary engineers.								
3	Details of In-house Qualified Electrical Engineers								
4	Details of In-house Qualified Engineers for Fire Protection & Detection Works.								

5	Details of other in- house Specialists for any other work				
6	If the applicant is having existing associatio n n/ collaborati on or likely to form a consortium of/ with other contractor s for special work, the details of the intended set up shall be given along with details of technical staff on similar lines along with the detail of the firm they intend to collaborate .				

Notes:

- 1) Information has to be filled up specifically in this format. Please do not write remark "As indicated in Broacher".
- 2) Indicate other points, if any, to show your technical and managerial competency to any important point in your favor.

DETAILS OF INFRSTRUCTURE OF OFFICE

Sr. No.	Items	Numbers	Details
1	Office Premises, Area, etc		
2	Fax M/c		
3	Telephones		
4	Other Instruments		
5	Software used for planning		
6	Reference books used		
7	Subscription to magazines		
8	Any other information		

Sigi	n an	d S	ea
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Date:

EQUIPMENT TO BE DEPLOYED AT SITE

The Tenderer shall specify in the form given below list of proposed equipment to be deployed for the work if awarded to the Tenderer.

Туре	Number	Make	Capacity	Location	Bank

-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_				
		_				_	_		_		_	_		_	_		_	_	_	_	_
		S	IC	١ć	V	Α	T	U	R	Έ	C)F		Т	Е	N	D	E	R	Е	R

2. FORM OF TENDER

The Regional Head, Bank of Baroda, Regional Office, Valsad Region, 1st Floor Mahalaxmi Tower, Tithal Road, Valsad-396001, India

Dear Sir.

Ref: Construction of Baroda Swarojgar Vikas Sansthan (RSETI) building at plot with old survey no. 31/1, Village, Borkhet P.O. Godalvihir, Tehsil Ahwa, District Dang, Gujarat, India.

Having examined the plans, specifications and schedule of quantities prepared by your **Architect**, **M/S.SHYAMAL GANDHI & ASSOCIATES**, and satisfying ourselves as to the location of the site and working conditions, I/we hereby offer to execute the above works at the respective rates which I/we have quoted for the items in the Schedule of Quantities.

I/We herewith **EMD of Rs. 2,57,000 (Rupees two lakhs fifty-seven thousand only)** by Demand Draft or Banker's cheque drawn in favor of Bank of Baroda, Valsad Regional Office for the execution of the works at my/our tendered rates together with any variations should the work be awarded to me / us.

In the event of this tender being accepted, I/we agree to enter and execute the necessary contract required by you. I/We do hereby bind myself/ourselves to forfeit the aforesaid deposit and EMD in the event of our refusal or delay in signing the Contract Agreement. I/we further agree to execute and complete the work within the time frame stipulated in the tender documents. I/We agree not to employ Sub-Contractors without the prior approval of the Bank.

I/We agree to pay Sales Tax, Works Contract Tax, Excise Tax, Octroi, VAT, Duties, service tax all Royalties, GST and all other applicable central/state/local taxes prevailing and be levied from time to time on such items for which the same are livable and the rates quoted by me/us are inclusive of the same.

I/we understand that you are not bound to accept the lowest tender or bound to assign any reasons for rejecting our tender. I/we further understand that Bank of Baroda, Region office - Valsad Region may award Contracts for work to more than one Contractor and that I/we shall make no claims whatsoever if, Bank of Baroda, Valsad Region accept only a part of my/our tender. We unconditionally agree to Bank of Baroda, Region office, Valsad Region's preconditions stipulated in the tender documents.

I/We agree that in case of my/our failure to execute work in accordance with the specifications and instructions received from the Owner or the Architect/Consultants appointed by the Bank of Baroda, Region office, Valsad Region during the course of the work, reserves the right to terminate my contract and forfeit the Earnest money deposit paid by me in additions to recovery of all the dues to the from the payment receivable by me. Further I may also be barred from tendering in future and its subsidiaries.

I/we enclose demand draft or Banker's Cheque of Rs. 2,57,000 (Rupees two lakhs fifty-seven thousand only) as Earnest Money deposit in favor of Bank of Baroda, Region office, Valsad Region. I/we agree to keep our tender open/valid for 90 days from the date of opening of envelope No. 2 i.e. (Financial bid).

I/we enclose herewith the completed tender documents duly signed in duplicate in envelope No. 3. (Commercial Bid).

Yours truly,
Place
[To be signed by the Proprietor/Partner/Authorized Representative of Tenderer holding Power of Attorney]
Date:

3. DESCRIPTION OF WORK

GENERAL:-

The work content of civil work, electrical, plumbing, water tanks (UG/OH), site development, rain water harvesting, firefighting system and allied works; here is some information about these works.

Proposed construction area: -Ground Floor - 4345 Sq. Ft. (approx). First Floor - 4345 Sq. Ft. (approx)

The time period to complete the work in all respect within -7- (seven) months by the successful bidder from the date of issue of letter of acceptance.

Civil work, electrical, plumbing, water tanks (UG/OH), site development, rain water harvesting, firefighting system and allied works:

The project aims to construct a BSVS Ahwa Building (new institutional building) as a framed structure. Work to be carried out as per the design, drawings, approved layout. Building plan is to be carried out in frame structure as per the detailed drawing and design. The detailed structure& design will be supplied by the architect/consultant of Bank.

There are Civil works like excavation, R.C.C. works, brick works, plaster works, flooring work, plumbing /sanitation work, electrical work, firefighting ,infra-structure /allied works ,Painting work, interior furnishing works etc. Great care should be taken in all work. The contractor will have to execute the work as per tender terms/conditions/specifications mentioned in the tender as well as in the price bid in line with respective IS codes/standard construction practices.

4. INSTRUCTIONS TO TENDERERS

- **1.0** Location: The site is located at Old Survey No.31/1, at Borkhet, Ta- Ahwa, Dist.: Dang.
- 1.1 Tenderers must get acquainted with the proposed work and study drawings, designs, specifications, conditions of contract and other conditions carefully before tendering. The Tenderer shall seek clarifications on any item, if required, prior to submitting his tender. No request of any change in rates or conditions for want of information on any particular point shall be entertained after receipt of the tenders.
- 1.2 The Tenderer is advised to inspect the site to ascertain the nature of site, access thereto, location, facilities for procurement of materials, labor rates and execution of the work. The Tenderer shall be deemed to have full knowledge of the site and drawings whether or not he actually inspects them.

2.0 Submission of Tender:

Tender in duplicate must be submitted in original to The Manager (P&E), Bank of Baroda, Valsad Region, Regional Office, 1st Floor Mahalaxmi Tower, Tithal Road, Valsad.

2.1 And as per details given here under, the rates shall be filled in the Schedule given in, of the tender document.

In case of any queries, the Tenderer may contact Bank of Baroda, Region office, Valsad Region.

- 2.2 The Tenderer is requested to quote strictly as per the terms and conditions, basic rates and specifications given in the tender document and not to stipulate any deviations. However, deviations, if unavoidable, should be indicated separately indicating the specific page number and clause number against which the deviations are made. Wherever specifications of certain works are not available they shall be deemed to be done as per relevant I.S code. Bank reserves the right to vary scope of works/item (increase/reduce) for which no claim will be entertained from the contractor.
- 2.3 Any addendum/corrigendum to this tender shall be advertised on the Bank's website only (if issued). An addendum/corrigendum must be signed and submitted along with the tender document.
- 2.4 Tender opening (technical/financial), Pre-bid meeting shall be organized at Regional Office, Valsad.

2.5 All pages to be signed:

All signatures in tender documents shall be dated and stamped. All pages of tender documents shall be initialed at the lower right-hand corner or signed wherever required in the tender papers by the Tenderer or by a person holding power of attorney authorizing him to sign on behalf of the Tenderer before submission of tender.

2.6 Rates to be in figures and words:

The Tenderer should quote in English both in figures as well as in words the rates and amounts tendered by him in the Schedule of Rates for each item and in such a way that interpolation is not possible. The amount for each item should be worked out and entered and requisite totals given of all items both in figures and in words. The tendered amount for the work shall be entered in the tender and duly signed by the Tenderer.

2.7 Corrections and Erasures:

- 2.8 The tender shall contain the name, postal address of the residence and place of business of the authorized person signing the tender and shall be signed in /his usual signature. Partnership firms shall furnish the full names of all Partners in the tender. It should be signed in the partnership name by all the partners or by a duly authorized representative followed by the name and designation of the person signing. The tender by a Corporation shall be signed by an authorized representative, and a power of Attorney on their behalf shall accompany the tender. A copy of the partnership deed of the firm with names of all partners shall be furnished.
- 2.9 When a Tenderer signs a tender in a language other than English, the total amount tendered should, in addition, be written in the same language. The signatures should be attested by at least one witness.

2.10 Witness:

Witnesses and sureties shall be persons of status and propriety and their names, occupation and address shall be stated below their signatures.

2.11 Information required along with tender:

The following details are required to be submitted along with tender:

- a) List of Subcontractors to be employed.
- b) List of equipment proposed to be deployed for work.
- c) Site Organization chart with biodata of Resident Engineer and key personnel proposed to be deployed at site.
- d) Income Tax Clearance and Sales Tax clearance certificates.
- e) Power of Attorney in the name of persons who has signed the tender document.
- f) Programme of work.
- g) Each Tenderer shall submit with his tender a list of large works of like nature he has executed giving details as to their magnitude and cost, the proportion of work done by the contractor in it and the time within which the works were completed. The Tenderer shall also submit along with his tender a list mentioning the names of manufacturers of specialized items.
- 3.0 Any printing or typographical errors/omission in tender document shall be referred to the Architect/Consultants appointed by the Bank and their interpretation regarding correction shall be final and binding on Contractor.

4.0 Transfer of Tender Documents:

Transfer of tender documents purchased by one intending Tenderer to another is not permitted.

5.0 Earnest money:

6.1 The Tenderer shall pay the amount of Rs.2,57,000 (Rupees two lakhs fifty-seven thousand only) Earnest Money Deposit by Demand Draft or Banker's cheque payable to Bank of Baroda, Region Office, Valsad. Interest on Earnest Money deposited by the

- 6.2 The Earnest Money of the unsuccessful Tenderers will be refunded without any interest.
- 6.3 The Earnest Money deposited by the successful Tenderer shall be retained as part of Security Deposit.
- The Security Deposit shall be forfeited if the Contractor fails to observe any terms and conditions of the Contract.

7.0 Validity:

Tenders submitted by Tenderers shall remain valid for acceptance for a period upto 90 days from the date of opening of financial bid. The Tenderers shall not be entitled during the period of validity, without the consent in writing to revoke or cancel his tender or to vary the tender given or any terms thereof.

8.0 Addendum/Corrigendum:

- 8.1 Addendum/Corrigendum to the tender document shall be issued (if required) on the Bank's website only for clarification of queries etc. Bidders are expected to keep in touch with Bank's website till the opening of tender.
- 8.2 All addendum/corrigendum issued shall be treated as part of the tender and to be submitted along with tender documents.

9.0 Right to accept or reject tender:

9.1 The acceptance of a tender will rest with the Bank of Baroda, Region Office, Valsad Region who do not bind themselves to accept lowest tender and reserve to themselves the authority to reject any or all the tenders received without assigning any reasons. They also reserve the right to accept the whole or any part of the tender and the Tenderers shall be bound to perform the same at the rates quoted. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect or there is any correction not duly signed and dated by the Tenderer are liable to be rejected. For this purpose, tenderer/bidder shall quote rates for various items which will be self-sufficient to meet their whole costs for executing any / every item. No demand for variations in rates for items executed shall be entertained on the Bank of Baroda, Region Office, Valsad Region deciding to delete, alter or reduce the quantities specified in respect of the any item. Conditional tender shall not be accepted.

10.0 Rates:

- 10.1 Bank of Baroda, Region Office, Valsad Region is not concerned with any rise or fall in the prices of materials and labor. The rates quoted shall include all costs, allowances, taxes including sales tax, GST on works contract or any other charges including any enhanced labor rates etc. which may become effective for any reason including those due to acts of Government/ Statutory Bodies enacted from time to time by the State and or the Central Government. Under no circumstances, shall be held responsible for compensation or loss to the contractor due to any increase in the cost of labor or materials etc.
- 10.2 The rate quoted in the tender shall also include electric and water consumption charges for construction and erection. If power and water are available at the site, the Contractor shall have to make his own arrangements to obtain the connections from the available sources at his own expense and maintain an efficient service of electric

light and power and water and shall pay for the services consumed and maintain the installations at his own cost. If no power and water are available at the site, the Contractor shall have to make his own arrangements to obtain power and water connections and maintain at his own expense an efficient service of electric light and power and shall pay for the electricity consumed.

The contractor has to arrange photographs of the works at every stage till work completion. Photographs to be submitted to Regional Office, Valsad at every stage. The rate quoted in the tender by the contractor should include cost of 2 sets of 10" x 12" photographs done by a reputed professional photographer.

- 10.3 Contractor to include cost of pest control treatment of the plinth area, including white ants, roaches, rodents for one year from date of virtual completion of the contract.
- 10.4 The contractor has to mandatorily submit a guarantee for water proofing works (wherever item executed) and for external painting works for a period of next -10- years from the date of work completion.
- 10.5 Contractor to coordinate and assist the Architect/consultant in obtaining all statutory approvals including local authority or state authority in force. Any expenses incurred in obtaining such approvals are deemed included in the rates quoted by the Contractors.
- The entire work shall be guaranteed to be free from manufacturing defects, defective workmanship or materials and any defects that may appear within 12 months from the date of issue of completion certificate which in the opinion of the Architects/Consultants have arisen from bad manufacturing, workmanship or materials, shall upon intimation be made good by the Contractor at his own cost within the time specified. During the said period of 12 months the Contractor shall, without any extra cost, carry out all routine and special maintenance of the Interior & exterior and attend to difficulties and defects that may arise. The Tenderer / Contractors shall associate with him during the execution and free service period, the operation and maintenance staff of the Bank.
- Payments for the work to be executed under this contract shall be made as per the tender document, and no variation in the mode of payment will be acceptable.
- 13 The Tenderer shall guarantee that the work shall conform to the detailed specifications.

14 Signing of the contract:

The successful Tenderer shall be required to execute an agreement in the proforma attached with this tender document within -7- days from the date of receipt of the notice of acceptance of tender. In the event of failure on the part of the successful Tenderer to sign the agreement within the above-stipulated period. The reserves the right to forfeit the earnest money/ security deposit and cancel the contract. Until the Agreement is formally signed, the Work Order / Letter of Acceptance of Tender issued to the successful tenderer and accepted by him shall be operative and binding on the Bank and the Contractor.

- 15. On acceptance of the tender, the name of the accredited representatives of the Tenderer who would be responsible for taking instructions from the Bank shall be mentioned by the Tenderer.
- 16. The Bank reserves the right to reproduce partly or fully the items executed on site anywhere in the country premises and no copyright claims shall be made by any contractor of any description from the Bank.

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA

17. The Bank has the right to delete items, reduce or increase the scope of work without the contractor claiming any compensation for the reduction in the scope of work.

I / We hereby declare that I / We have read and understood the above instructions for the guidance of the Tenderers $\,$

Signature of Witness Signature of Tenderer Address: - Address:-

Date :

5. ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT MADE THIS Dtbetween Bank of Baroda										
Regional Office, Valsad Region (hereinafter called "THE EMPLOYER") of the one part and										
Shri M/s.										
								_		
Registered at	under	Companies	Act,	1956	and	having	its office)		
						Pa	yable at			
√alsad Regio	n (hereinafte	er called "THE CC	ONTRACT	OR") of the	other par	t.				
2.1. WH	EREAS "de	esires to engage	one conf	tracting ag	ency for	(as descr	ibed under			
scope of works hereto) to be carried out for their per the Architectural and plans, sections, elevations etc. respectively prepared by the section of the carried out for their per										
Arcl	nitect, M/s, \$	Shyamal Gandhi	& Associ	ates. On th	ne basis of	f the above	∍.			

- 2.2. The term "Architect" in the said conditions shall mean the said M/s. **Shyamal Gandhi & Associates.** and shall include their heirs, legal representatives and assignees or in the event of his/their death or ceasing to be the architect for the purpose by the , such other person as shall be nominated for that purpose by the , not being a person to whom the contractor shall object for reasons considered to be sufficient by the Arbitrator, mentioned in the said conditions provided always that no person subsequently appointed to be entitled to disregard or overrule any previous decisions or approvals or directions given or expressed by the Architect for the time being.
- 2.3. In response to the tenders invited by /Architect, the CONTRACTOR have inspected the site and surroundings of the works specified in the tender documents and have before accepting the Contract, satisfied themselves by careful examination about the nature of the work and nature of the site and local conditions, quantities nature and magnitude of work, the availability of labor and material necessary for the execution of work, the means of access to work site, the supply of power and water thereto and the accommodation they may require and have made local and independent enquiries and obtained complete information as to the matters and things referred to, or implied in the Contract or having any connection therewith and have considered the nature and extent of all probable and possible situations, delays, hindrances, or interferences to or with the execution and completion of work to be carried out under the Contract being awarded hereunder and have examined and considered all other matters, conditions, and things and probable and possible contingencies thereto affecting the execution and completion of work and which might have influenced them in accepting the Contract.
- 2.4. The following documents annexed hereto and marked as Annexure as per numbers given against each of these documents, shall form an integral part of this Agreement as if these were fully incorporated herein and this.
- 2.5. Agreement together with all its Annexure is hereinafter referred to as the CONTRACT.

- 2.6. Annexure
 - 2.6.1. Form of Offer
 - 2,6,2. Brief description of work
 - 2.6.3. Special Notes & conditions to the contract
 - 2.6.4. General Conditions of Contract
 - 2.6.5. Special Conditions of Contract & Appendix
 - 2.6.6. Contractor's Labor rules and Regulations
 - 2.6.7. Format of Bank guarantee for bid offer security.
 - 2.6.8. Form of performance Bank guarantee
 - 2.6.9. Technical specifications for works
 - 2.6.10. Bill of Quantities
- 2.8. Contractor shall not claim any escalation in contract rate for rise in prices of materials/labor etc. during the completion of work and shall complete the work at contracted rate which shall be valid for project period _____ Months from the date of commencement of work. In case of extension in the time for execution of the contract beyond Project period __ Months, for the reasons of delay attributed to the contractor he shall not be eligible for escalation and the architect's decision in this respect shall be final and binding on the contractor.

NOW THESE PRESENTS WITNESSETH AND IS HEREBY AGREED AND DECLARED AS FOLLOWS: -

- 2.9. The CONTRACTORS shall provide, execute and complete all the works mentioned in the CONTRACT and shall do and perform all other acts and things mentioned or described in the CONTRACT or which are to be implied there from or may be necessary for the completion of the said works and the times and in the manner and subject to the terms and conditions or stipulations mentioned in the CONTRACT.
- 2.10. It has been understood by the parties hereto that they will have the right to make changes in the drawings and designs during the progress of the construction works without prejudice to the CONTRACT. Notwithstanding anything to the contrary contained in any of the Annexure hereto the CONTRACTORS shall commence the work on _____ and shall complete the same on or before ------ and the time shall be the essence of the CONTRACT. In consideration of the due provision, execution and completion of all the works, in terms of the CONTRACT the does hereby agree with the CONTRACTORS that the will pay to the CONTRACTORS the respective amounts for the work actually done by them. Such Payments shall be made at such time and in such a manner as provided for in the CONTRACT.
- 2.10.1. The CONTRACTORS do hereby agree to pay such sums as may be due to the service rendered or material supplied by the client to the CONTRACTORS as set out in the CONTRACT.
- 2.10.2. The contractors do hereby agree that the amount of liquidated damages specified in conditions of contract / special conditions of contract represents a genuine and fair estimate of the loss likely to be suffered by the in the event of the works not being completed in time.

- 2.11. It is specifically and distinctly understood and agreed between Bank of Baroda and the CONTRACTORS that the CONTRACTORS shall have no right, title or interest in the site made available by the for the execution of the works or in the building, structures or works executed on the said site by the CONTRACTORS in the goods articles, materials etc. brought on the said site (unless the same specifically belongs to the CONTRACTORS) and the CONTRACTORS shall not have or deemed to have any lien or charge whatsoever for unpaid bills and it will not be entitled to assume or retain possession or control of the site or structure and the shall have an absolute and of the site and to remove unfettered right to take full possession the CONTRACTORS. their servants. agents and materials belonging the CONTRACTORS lying in the site.
 - 2.12. The CONTRACTORS shall be allowed to enter upon the site for execution of the works only for the purpose of executing the contract work and shall not have any claim, right title or interest in the site or the structures erected thereon and shall not enter upon at any time without assigning any reason.
 - 2.13. The materials including sand, gravel, stone, loose earth, rock etc. dug up or excavated from the said site shall, unless otherwise expressly agreed under the CONTRACT, exclusively belong to the and the CONTRACTORS shall have no right or claim over the same and such excavation and materials shall be disposed off as per the instruction of the authority.
 - 2.14. The dispute or difference if any, relating to this agreement or any document appended hereto shall be settled by arbitration under the provisions of Indian Arbitration & Conciliation Act, 1996 or any rules and regulations framed there under within the jurisdiction of Valsad and the jurisdiction of arbitration shall be the city of Valsad only.

IN WITNESS WHEREOF the parties have executed these presents on the day and the year first above written.

Regional Office, Valsad Region						
WITNESSES	WITNESSES					
1	1					
2	2					

Signed and Delivered for Signed and Delivered for and on behalf And on

6. GENERAL CONDITIONS OF CONTRACT

1. GENERAL CONDITIONS OF CONTRACT

- **1.1.** In construing these conditions and the specifications, Schedule of Quantities and Contract Agreement, the following words shall have the meanings herein assigned to them except where the subject or context otherwise requires.
- **1.2.** "Bank" shall mean Bank of Baroda, Regional Office, Valsad Region and "BSVS" shall mean **At** —**Borkhet, Tal: Ahwa, Dist.:Dang.** And shall include his/their heirs, legal representatives, assignees and successors.
- **1.3.** The "Architect/Consultant" shall mean M/s.Shyamal Gandhi & Associates, 21, Vir Nagar Society, Opp. I.D.B.I Bank, Nr. Gayatri Hospital, Bhimjipura, New Wadaj, Ahmedabad-380013 1. Appointed by for the said works.
- **1.4.** "Contractor"/"Contractors" shall mean the person or the persons, firm or company whose tender has been accepted by the client and shall include his/their heirs, and legal representatives, the permitted assigns and successors.
- **1.5. "This Contract"** Shall mean the Articles of Agreement, the conditions, the Appendix, the Schedule of Quantities and specifications attached hereto and duly signed.
- **1.6.** "Site" Shall mean the site of the contracted works including any building and erection thereon and any other land (inclusively) as aforesaid allotted by the for the contractor's use.
- **1.7. "Works"** shall mean the works to be executed and recorded in accordance with the Contract and shall include all extra or additional altered or substituted works as required and recorded for the performance of the Contract
- **1.8.** "Contract Documents" shall include the notice inviting Tenders, the Articles of Agreements, the General Conditions of Contract, the special conditions of contract, the Appendices, the Schedule of Quantities, Specifications for Materials, Work-Sheet and mode of measurements, and drawings pertaining to the work. All sections of this Contract Document are to be read together. Further such correspondence between the / Architect/Consultant and Contractors as admitted by the before award of work and thereafter should also form part of contract documents.
- **1.9.** "**Drawings**" shall mean the drawings referred to in the specifications, description of items etc. and any modifications of such drawings approved in writing by the Architect/Consultant and such other drawings as may from time to time be furnished or approved in writing by the **Architect/Consultant**.
- **1.10.** "Notice in Writing" or written notice shall mean a notice in writing, typed or printed characters, sent by the BANK or Architect/Consultant (unless delivered personally or otherwise) proved to have been received by registered post to the last known private or business address or registered office of the contractors and shall be deemed to have been received by them when in the ordinary course of post it would have been delivered.

- **1.11.** "Act of Insolvency" shall mean any Act of Insolvency as defined by the Presidency Towns Insolvency Act, or the Provincial Insolvency Act or any Act amending such original act/s.
- **1.12.** "Virtual Completion" shall mean that the works are in the opinion of the Architect/Consultant complete or fit for occupation.
- **1.13.** Words importing persons include firms and Corporations, words importing the singular only also include the plural and vice versa where the context requires.
- **1.14.** Headings and marginal notes relating to these conditions shall not be deemed to form a part there of or be taken into consideration in the interpretation or construction thereof or of the contract.
- 1.15. "Net Prices" If in arriving at the contract amount the contractor shall have added to or deducted from the total of the items in the Tender any sum, either as a percentage or otherwise, then the net price of any item in the Tender shall be the sum arrived at by adding to or deducting from the actual figure appearing in the Tender as the price of that item a similar percentage of proportionate sum, provided always that in determining the percentage or proportion of the sum so added or deducted by the contractor the total amount of any Prime Cost Items and Provisional sum of money shall be deducted from the total amount of the Tender. The expression "net rates" or "net prices" when used with reference to the contract or accounts shall be held to mean rates or prices so arrived at. Words "importing persons" including firms and corporations. Words importing the singular only also include the plural and vice versa where the context requires.

2. SCOPE OF CONTRACT:

- 2.1. The contract comprises of the construction, completion and maintenance of the works, provision of all Labor, materials, constructional plant, temporary works and everything whether of a temporary or permanent nature required in and for such construction, completion and maintenance.
- 2.2. The Contractor shall carry out and complete the works in every respect in accordance with this Contract and with the directions of and to the satisfaction of the Architect/Consultant/BANK. The Architect/Consultant may in his absolute discretion and from time-to-time issue further drawings and/or written instructions, details, directions and explanations, which are hereafter collectively referred to as "instructions". These instructions shall be reflected either in the minutes or in any other form when Bank's approval/ consent is obtained in regard to: -
 - 2.2.1. The variation or modification of the design, quality or quantity of works or the addition or omission or substitution of any work.
 - 2.2.2. Any discrepancy in or divergence between the Drawings or between the Schedule of quantities and/or Drawings and/or specifications.
 - 2.2.3. The removal from the site of any materials brought thereon by the Contractor and the substitution of any other materials thereof.
 - 2.2.4. The removal and/or re-execution of any works executed by the Contractor.

- 2.2.5. The postponement of any work to be executed under the provisions of this Contract.
- 2.2.6. The dismissal from the work of any person employed thereupon.
- 2.2.7. The opening up for inspection of any work covered up.
- 2.2.8. The amending and making good of any defects.
- 2.2.9. Co-ordination of work with other agencies appointed by the Bank for due fulfillment of the total work.
- 2.2.10. The Bank shall have a right to delete any item of work from the scope of contract and contractor shall not make any extra claim on this account.
- 2.2.11. The Contractor shall forthwith comply with and duly execute any work contained in Architect/Consultants instructions whether oral or written, It is provided that verbal instructions, directions and explanations given to the Contractor or his representative upon the works by the Architect/Consultant shall, if involving a variation, be confirmed in writing by the Contractor within 5 days and if not dissented from in writing within a further 10 days by the Architect/Consultant, such shall be deemed to be the Architect/Consultant's instructions within the scope of the contract.
- 2.2.12. If Compliance with the Architect/Consultant's instructions involves any variation, the BANK shall pay the Contractor on the Architect's certificate the price of the said work (As an extra to be valued by the Architect as hereinafter provided).
- 2.2.13. If the Contractor fails to comply with the Architect/Consultant's instructions within a fort night after the receipt of written notice from the Architect/Consultant requiring compliance with such instructions, the Bank through the Architect/Consultant may employ some other agency to execute any work whatsoever which may be necessary to give effect to such instructions
- 2.2.14. For the purpose of entering day-to-day instructions by the Architect/Consultant, the Contractor shall maintain at his own cost, a "Site Instruction Book" in duplicate in which the instructions shall be entered by Architect/Consultant.
- 2.2.15. 'Instruction' to the Contractor shall be generally issued through Architect/Consultant. However, Architect/Consultant or Bank for the sake of urgency as a result of inspection may issue instructions directly.

3. **GENERAL OBLIGATIONS**

3.1. CONTRACT:

The contractor shall enter into and execute a contract in the form annexed hereto within the line specified in the letter of intent and in default thereof the earnest money paid by the contractor shall be forfeited and acceptance of this tender shall be considered as withdrawn. The cost of the stamp of the agreement is to be borne and paid by the contractor.

3.2. TOTAL SECURITY DEPOSIT:

Total Security Deposit shall comprise:

- Earnest Money Deposit
- Initial Security Deposit
- Retention Money

3.2.1. EARNEST MONEY DEPOSIT:

a) The Tenderer shall deposit an amount of Rs.2,57,000 (Rupees two lakhs fifty-seven thousand only) in the form of Demand Draft or Banker's cheque drawn in favor of **Bank of Baroda, Valsad Region, Regional office, Valsad** at the time of submission of tender as Earnest Money.

- b) No tender shall be considered unless the Earnest Money is so deposited. No Interest shall be paid on this Earnest Money Deposit.
- c) The Earnest Money of an unsuccessful Tenderer will be refunded, without any interest, soon after the decision to award the work is taken.
- d) The Earnest Money Deposit shall stand absolutely forfeited if the Tenderer revokes his tender at any time during the period when he is required to keep his tender open for acceptance by the BANK, or if, after the tender is accepted, the Contractor fails to enter into a formal agreement/or if he fails to pay the security deposit as stipulated/or if he fails to commence the work within stipulated time limit.

3.2.2. **SECURITY DEPOSIT**:

- a) The successful Tenderer to whom the Contract is awarded shall deposit as initial security deposit in cash /by BANK Draft/BANK Guarantee a sum to make up 2% of the value of the accepted tender after the appropriation of the Earnest Money deposited by him. EMD will be part of the security deposit.
- b) The successful Tenderer shall pay a security deposit within -10- (ten) days after receiving the letter of acceptance of his tender. No interest shall be paid on this security deposit.
- c) The security deposit, either in whole or in part thereof, shall be forfeited in the event of the Contractor's failure to observe any terms of this Contract/or non-compliance with the conditions of the Contract.
- d) On virtual completion of the job and on the Contractor's submitting to the Architect/Consultant the "As built" drawings, the Architect/Consultant shall declare the job to be virtually complete and issue a certificate to this effect. Upon acceptance by Bank of such certificate, Security Deposit will be refunded after adjusting any dues recoverable from the contractors.

3.2.3. **RETENTION MONEY:**

- a) In addition to the Initial Security Deposit, retention of 8% of the value of the work done from every running bill will be deducted till total retention including EMD and SD paid earlier, is becomes 5% of the contract value, and shall be held by the Bank.
- b) If the Contractors do not carry out the rectification work during the Defects Liability Period, the Bank shall have the right to get such defective work rectified after giving due notice in writing to the Contractors and recover the cost of repairs from the monies so retained.
- c) On acceptance of the Virtual Completion certificate, 50% of the total retention amount (i.e. 5% of the total completion cost including all variations) will be released.
- d) The Balance 50% of retention amount will be released upon completion of 1 calendar year from the date of acceptance of Virtual Completion within 15 days after adjusting all dues if any from the contractor.

3.3. ACCESS TO WORKS:

The Architect/Consultant/Bank and any person authorized by them shall at all times have free access to the works, and to the workshops, Factories or other places where materials are being prepared or constructed for the Contract and also to any place where the materials are lying or from which they are being obtained. The Contractor shall give every facility to the Architect/Consultant/Bank and their representatives for inspection and examination and test of the materials and workmanship. No person unless authorized by the Architect/Consultant or the Bank, except the Representatives of Statutory Public Authorities authorized by the Bank, shall be allowed on the works at any time. If any work is to be done at a place other than the site of the work, the Contractor shall obtain the written permission of the Architect/Consultant/ Bank for doing so.

3.4. TENDERER TO VISIT SITE:

Each Tenderer must, before submitting his tender visit the site of works so as to ascertain the physical site conditions and prices, availability and quality of materials according to Specifications before submitting the quotations.

3.5. INSPECTION OF SITE AND SUFFICIENCY OF TENDER:

- a) The Contractor shall inspect and examine the site and its surrounding and shall satisfy himself before submitting his tender as to the form and nature of the site, the quantities and nature of access to the site, the accommodation he may require and in general, shall himself obtain all necessary information as to risk, contingencies and other circumstances which may influence or affect his tender.
- b) The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of work/items/quantities or in Bills of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for proper completion and maintenance of the works.
- c) No extra charges consequent on any misunderstanding or otherwise shall be allowed.

3.6. INSPECTION OF DRAWINGS:

Before filling in the Tender, the Tenderer will have to check up all Drawings and Schedule of Quantities and will have to get an immediate clarification from the **Architect/Consultant** on any point that he feels is vague or uncertain. No claim for damages or compensation will be entertained on this account.

3.7. INTERPRETATION OF CONTRACT DOCUMENTS

- 3.7.1. The various sections of tender / contract documents are intended to be complementary to one another.
- 3.7.2. In case of a discrepancy in the description of a subject between different sections, the following guidelines shall generally apply.
- 3.7.3. Special Conditions of Contract shall override General Conditions of Contract.

- 3.7.4. Special specifications shall override General specifications.
- 3.7.5. For the sole purpose of determination of rates and prices, the Schedule of Quantities including its Preamble shall override Specifications and drawings.
- 3.7.6. Detailed drawings shall override General layout drawings.
- 3.7.7. Hard copies of the drawings shall override Softcopies.
- 3.7.8. Irrespective of these general guidelines the Contractor shall bring any discrepancy he notices immediately to the attention of the **Architect/Consultant** and shall follow **Architect/Consultant's** instructions accordingly.

4. QUALITY CONTROL

4.1. QUALITY ASSURANCE:

The contractor shall prepare a detailed quality assurance programmed to control activities connected with the work to ensure a quality job at various stages

- Planning
- Execution
- Completion
- Post Completion Maintenance

4.2. DRAWINGS AND SPECIFICATIONS:

- 4.2.1. The Work shall be carried out to the entire satisfaction of the Bank/ Architect/Consultant and in accordance with the signed drawings, tender terms & specifications, preambles and such further drawings and details as may be provided by the Architect/Consultant and in accordance with such written instructions, directions and explanations as may from time to time be given by the Bank/Architect/Consultant whose decisions as to sufficiency and quality of the work and materials shall be final and binding upon all parties.
- 4.2.2. No drawing shall be taken as in itself an order for execution unless, in addition to the **Architect/Consultants** signature, it bears express words stating remark "FOR CONSTRUCTION".
- 4.2.3. Three complete sets of the signed Drawings and Specifications and Schedule of Quantities shall be furnished by the **Architect/Consultant** to the Contractor. Such copies shall be kept on the works, and the **Architect/Consultant** or his Representatives shall at all times have access to the same.
- 4.2.4. All drawings and specifications shall be returned to the **Architect/Consultant** by the Contractor before the issue of the final certificates. The original copy of the contract shall remain in the custody of the **Bank** and shall be produced by him at his office as and when required.
- 4.2.5. Any additional prints of drawings, if any, required by the contractor will be supplied by the **Architect/Consultant** on the payment of charges as stipulated in clause 4.2.8.
- 4.2.6. Over and above, Soft Copies of the drawings will be issued by the Seal with signature of the bidder

Architect/Consultant if requested by the Contractor. Necessary protection will be used by the Architect/Consultant to prevent willful editing of such softcopies of the drawings by the contractors. In case of any dispute between Contractor and Architect Consultant on sanctity of such drawings, hard copies issued by the Architects/Consultants shall prevail and by binding on both the parties.

4.2.7. **DIMENSIONS**:

Figured dimensions are in all cases to be followed and in no case should they be scaled. Large-scale details take precedence over small-scale drawings, in case of discrepancy; the Contractor is to ask for an explanation before proceeding with the work.

4.2.8. **ISSUE OF CONSTRUCTION DRAWINGS:**

- a) Architect/Consultant will supply three sets of drawings to the Contractor for construction. Extra prints of drawings for construction will be issued on chargeable basis by Architect/Consultant as detailed hereunder:
 - i) A0-Size Rs. 500.00 each
 - ii) A1-Size Rs. 400.00 each
 - iii) A2-Size Rs. 300.00 each
 - iv) A3-Size Rs. 200.00 each
 - v) A4-Size Rs. 50.00 each
- b) The Contractor shall ensure that all the bills furnished by the **Architect/Consultant's** Office in this regard are honored, failing which the certificate for payment of Contractor's next Interim Bills will be withheld. The drawings are to be used only for the project concerned.

4.2.9. **CONSTRUCTION DRAWINGS**:

- a) The successful Tenderer shall state, on receiving the Letter of Intent, what drawings are yet to be issued by the Architect/Consultant for construction purposes and what further details are required by him from the Architect/Consultant. Silence on the part of the successful Tenderer in this regard will be construed to mean that he has all the information that he needs for ordering out materials and for contractual purposes. Unless specifically asked for in writing, delays later claimed by the successful Tenderer on account of drawings will not be construed as reason for delay in the execution of the work.
- b) Apart from clarifications sought during the periodic visits to site by the **Architect/Consultant's** representative, the successful Tenderer shall obtain all clarifications on the **Architect/Consultant's** drawings from their office.
- c) Extra/Variations not registered within 2 weeks on receipt of drawings will not be entertained.

4.2.10. SHOP DRAWINGS AND TECHNICAL DATA

The Contractor shall submit, in triplicate within mobilization period on receipt of acceptance of the tender, detailed shop drawings, and specifications showing the complete details of all relevant works required to be done by Bank. He will be held responsible for any discrepancies, errors, and omissions in the drawings or particulars submitted by him even if these have been approved by the **Architect/Consultant**. Any delay in submitting shop drawings shall be the Contractor's responsibility and shall be to his account.

4.2.11. COMPLETION DRAWINGS/ACCEPTANCEOF INSTALLATIONS:

- a) The Contractor shall submit the required guarantees for the works in approved formats as well as performance guarantees for those items of works for which such guarantees are required.
- b) Before handing over the works,3 copies of maintenance manual for major items shall be furnished to the BANK along with 3 sets of "as built" drawings of all the works done as executed by the contractor.
- c) In addition to hard copy of as built drawings, the contractor shall also supply soft copies of these drawings in AutoCAD – 2008 OR latest version format similarly the maintenance manual etc. shall also be supplied in soft form with suitable indexing format for easy retrieval and reference.

4.2.12. **TECHNICAL DATA**:

Technical Data of relevant items shall be furnished as required.

4.2.13. ACTION WHERE THERE IS NO SPECIFICATION:

In the case of any class of work for which there is no specifications mentioned, the same shall be carried out in accordance with the Indian Standard Specifications subject to the approval of the **Architect/Consultant**.

4.3. EXTENT OF CONTRACT:

Items executed shall be complete in all respect with accessories, fittings as required though they may not have been specifically mentioned in the technical specification. All similar standard components/parts of similar items shall be inter-changeable.

4.4. MATERIALS & WORKS

4.4.1. APPROVAL OF SUPPLIERS:

For all supplies, the names of manufacturers/brands have to be got approved by the Architect/Consultant from the BANK after getting the respective samples first approved by the Architect/Consultant as the case may be. All materials will be of tested quality and as per relevant Indian Standards. In addition to the Test Certificates, mandatory tests will also be done on them by the Architect/Consultant at an approved laboratory at the cost of the contractor immediately as well as at regular frequency laid down in the relevant Indian Standards.

4.4.2. MATERIALS SUPPLIED BY THE BANK:

If the Bank supplies any materials, the Contractor must satisfy himself that the same conform to the Specifications. If the Contractor has any complaint, about the said materials, or the quality thereof the Contractor before using the said materials inform in writing all their objections to the Bank Should the Contractor fail to do so, he will be deemed to have satisfied himself as to the quality and the suitability of the said materials for being used in the Contract works and the Contractor will be in the same position as if the Contractor himself had purchased the said materials.

4.4.3. MATERIALS AND WORKMANSHIP TO CONFORM TO DESCRIPTION:

- a) All materials and workmanship shall, be of the respective kinds specified in the Schedule of Quantities and /or specifications and in accordance with the Architect/Consultants instructions and / or any test of all materials, which the contract provides for, and Architect/Consultant may require. The Contractor shall submit the samples of various materials to Architect/Consultant/ Bank for approval. Further, the contractor shall upon the request of the Architect furnish him with all invoices, accounts, receipts and other vouchers to prove that the materials comply therewith. The contractor shall at his own cost arrange for and/or carry out the test of any materials which the Architect may require.
- b) If the Contractor contends that any of the materials, goods or workmanship specified as aforesaid, is unobtainable, he shall submit to the BANK his grounds for his contention, and thereupon the **Architect/Consultant/Bank** shall verify the same and if required issue necessary clearances and/or instruction in writing.

4.5. VARIATIONS NOT TO VITIATE CONTRACT:

- 4.5.1. The Contractor shall when directed in writing by the **Architect/Consultant** to omit from or vary any works shown upon the drawings or described in the specifications or included in the priced Schedule of Quantities, carry out such directions but the Contractor shall not make any alterations in the provisions of the Contract without such authorization or direction in writing from the **Architect/Consultant/ BANK.**
- 4.5.2. No claim for any extra work executed shall be allowed unless it shall have been executed by the authority of the **Architect/Consultant** as herein mentioned. No variation, i.e. additions, omissions or substitutions shall vitiate the Contract.
- 4.5.3. No claim for payment for extra work shall be allowed unless the said work shall have been executed under the provisions of Clause "Authorities, Notices, Patent Rights and Royalties", or by the authorities, directions in writing of the **Architect/Consultant** as herein mentioned.
- 4.5.4. The rate of items not included in the Bill of Quantities shall be settled by the **Architect/Consultant** in accordance with the provisions of relevant clauses for variations.

4.6. VARIATIONS TO BE APPROVED BY THE BANK

- 4.6.1. Notwithstanding anything herein contained the rates for such extra/variation items shall be derived as far as possible from like items in the tender, adding/subtracting cost for such variations from like items.
- 4.6.2. In the event of such extra/variation items totally differ in specification/character/nature, rates for such items will be worked out based on prevailing market rates for the ingredients that go into making such of items and finalized by the **Architect/Consultant** in consultation with the **Bank**.

4.7. DEFECTS

4.7.1. **DEFECTS AFTER COMPLETION:**

Any defect in work and materials or due to unsound installation or other faults which may appear either in the work executed or in materials used within the "Defects Liability Period" stated in the Appendix to General Conditions of Contract hereto

or if none stated, then for a period of twelve months after the Virtual Completion of the work, arising in the opinion of the Architect/Consultant/Bank from materials or workmanship not being in accordance with the Contract, shall upon the directions and writing of the Architect/Consultant, and within such reasonable time as shall be specified therein, be amended and made good by the Contractor, at his cost unless, the Architect/Consultant in consultation with the Bank shall decide that he ought to be paid for such amending and making good and in case of default the Bank may employ and pay other persons to correct the faults, and all damages, loss and expenses consequent thereon or incidental thereto shall be made good and borne by the Contractor and such damage, loss and expenses shall be recoverable from him by the Bank or may be deducted by the Bank upon the Architect/Consultant's certificate in writing from the amount retained with the Bank vide relevant Clause for "Certificate and Payment "or any money due or that may become due to the Contractor or the Bank may in lieu of such amending and making good by the Contractor, deduct from such money a sum, to be determined by the Architect/Consultant, equivalent to the cost of amending such works, and in the event the said amount retained under relevant clause For "Certificate and Payment" and/or the other sums payable to the Contractor being insufficient, recover the balance from the Contractor.

4.7.2. INSPECTION & TESTS

a) **ACCESS FOR INSPECTION**:

The Contractor is to provide at all times during the progress of the works and the maintenance period proper means of access, ladders, gangways etc. and the necessary attendants to move and adapt the same as directed for the inspection or measurement of the works by the Bank/ **Architect/Consultant** or their representatives.

4.7.3. TESTING OF WORKS AND MATERIALS AND PREPARATION OF SAMPLES:

- a) The Contractor shall arrange to test materials and/or portions of the works as instructed by Architect/Consultant /Bank to specifications/ ISI standards at his own cost, in order to provide their soundness and efficiency. If after any such test, the work or portions of the works are found to be defective or unsound, the Contractor shall pull down and re-erect the same at his own cost.
- b) Samples of various materials shall be submitted by the Contractor for approval prior to ordering the same. Wherever necessary the Contractor shall, at his own cost, prepare samples to indicate workmanship.

4.7.4. **TEST DATA**

All the materials shall be tested jointly with the Bank/Architect/Consultant as required by the various sections of the specification and Test Data shall be furnished as required.

4.7.5. GENERAL CONDITIONS FOR TESTS TO BE CALLED FOR APPROVAL PURPOSE

- a) The Contractor shall carry out in the presence of Bank's Representative all specified tests. Such tests shall be carried out at the manufacturer's work or at the works of the Contractor or approved Sub-Contractor.
- b) The Contractor shall then forward all the relevant copies of Tests so performed in 3 sets for the record of the **Bank/Architect/Consultant**. No compensation of any kind will be payable to the Contractor for carrying out such tests.

c) The Contractor shall give clear 15 days' notice in writing for all such tests to be carried out at relevant place of Manufacture, Works, and Sub-works etc.

5. **COST CONTROL**

5.1. QUANTITIES

5.1.1. **SCHEDULE OF QUANTITIES**:

a) The Schedule of the Quantities unless otherwise stated shall be deemed to have been prepared in accordance with the standard procedure of the **Architect/Consultant** and shall be considered to be approximate and no liability shall attach to the **Architect/Consultant/Bank** for any error that may be discovered therein.

5.1.2. SUFFICIENCY OF SCHEDULE OF QUANTITIES:

- a) The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the Schedule of Quantities and/or the Schedule of Rates and Prices, which rates and prices shall cover all his obligations under the Contract, and all matters and things necessary for the proper completion of the works.
- b) The Contractor shall check all the drawings and details prepared by the **Architect/Consultant** and report errors if any in the drawings or details.

5.1.3. ERRORS IN SCHEDULE OF QUANTITIES:

a) Should any error appear in the Schedule of Quantities, other than in the Contractor's prices and calculations, it shall be rectified, and such rectification shall not vitiate the Contract but shall constitute a variation of the Contract and shall be dealt with as an authorized extra or deduction

5.1.4. Prime cost & Provisional sums:

- a) Where "Prime cost" (p.c.) prices or provisional sums of moneys are provided for any goods or work in the specification / Schedule of Quantities the same amount will be exclusive of any trade discounts or allowances, cash-discounts, profit, carriage and fixing which the contractor may require.
- b) All goods or work for which prime cost prices or provisional sums of money are provided may be selected or ordered from any manufacturers or firms at the discretion of the Architect of the Bank and the Bank reserves to himself the right of paying direct for any such good or Work and deducting the said prices and sums from the amount of contract. Should any good or work for which prime cost prices or provisional sums are provided or portions of the same be not required, such prices of sums, together with the profits allowed for the same and such additional amounts as the contractor may have allowed for carriage and packing will be deducted in full from the contract, whether the goods be ordered by the contractor or otherwise, the contractor shall at his own cost fix the same if called upon to do so and the contractor shall also receive and sing for such goods and be responsible for their safe custody from the date of their delivery upon the works.

- c) In cases in which the provisional quantities of materials are contained in the contract, the contractor shall provide such material to such amounts or to greater or less amounts as the Architect shall direct in writing as the net rates at which he shall have priced such items in his schedule of Quantities, should however any such items be entirely omitted, which omission shall be at the Architect's discretion, no profit or such items shall be allowed to the contractor.
- d) No prime costs sum or sums (or any portion thereof) shall be included in any certificate for payment to the contractor until the receipted accounts relating to them have been produced by the contractor to the Architect. Such accounts shall show all discounts and any sum or sums in respect of such discounts shall be treated as trade discount provided always that should the contractor in lieu of producing such receipted accounts request the Architect in writing to issue a Certificate on the Bank for such sum or sums due either on account in settlement to a sub-contractor direct, the architect shall, upon satisfying himself that the sub-contractor is entitled to the same, so issue the certificate, and such sum or sums shall be deducted from the amount of the contractor at the settlement of accounts and any profit or further sum which the contractor is property entitled in respect of such sub-contract, and which is in conformity with the terms of the contract, shall be allowed to the contractor at the settlement of accounts as though the amount of such certificate to the sub-contractor had been included in a certificate drawn in favor of the contractor.
- e) If the Contractor neither produces the receipt nor gives authority to the Architect to issue a certificate in favor of such sub-contractor directly, the Architect shall, upon giving the contractor seven days' notice in writing of his intentions to do so, issue to the Sub-contractor such Certificate directly on the Bank and obtain the receipt from the Sub-contractor, which receipt shall be deemed a discharge for the amount of such certificate as though given by the Contractor. In the event of such a default on the part of the Contractor, he shall not be allowed any profit he may have added in the Schedule of Quantities upon such contract.
- f) The exercise of the option before referred to by the contractor and the issue of certificate as before described to Sub-contractors upon the Contractor's request on the issue to sub-contractor direct of certificate by the Architect shall not, however, relieve the Contractor from any of the liabilities in respect of insufficient, faulty or in completed work or the Sub-contractor for which he may be liable under the terms of the contract.
- g) If any provisional items are provided for work of a nature usually carried out by the contractor in the ordinary course of his business, the Bank shall give the contractor an opportunity of tendering for the same without prejudice to the Bank's right to reject the lowest or any tender.

5.2. VARIATIONS

5.2.1. **EXTRA ITEMS / DEVIATIONS**:

- a) The Contractor shall not commence work in respect of any extra items/deviations without obtaining the approval of the Architect/Consultant in writing. The Contractor shall immediately submit the rate analysis for such item, with necessary details to support the rate quoted. The rate shall then be settled by the Architect/Consultant/Bank and the necessary certificate based on this shall be given to Bank while incorporating the item in the Interim Bills.
- b) Claims for extra/deviated items shall be submitted in the as per specimen copies of Seal with signature of the bidder

5.2.2. SCHEDULE OF QUANTITIES - VARIATION IN TENDER QUANTITIES

Quantities in this tender are subject to variation by way of addition, reduction or deletion of the items or quantities. No compensation whatsoever will be paid for such variations.

5,2,3. PRICES FOR EXTRAS ETC. - ASCERTAINMENT THEREOF:

- a) Should it be found from measurements taken in accordance with the clause on "Measurement of works" that any of the quantities or amounts of works thus ascertained are less or greater than the amounts specified for the works in the priced schedule of quantities and/or that any variation is made from the tender schedule of items by operating Additional items called "Extra Items" or "Substitute Items" in substitution of some tendered items, the rate and valuation thereof, of such items unless previously or otherwise agreed upon, shall be made in accordance with the following rules: -
- b) The net rate or prices in the original Tender shall determine the **valuation of the extra quantities** where extra quantities for any item are of similar character and executed under similar conditions as the work priced therein. In other words variation in quantities shall be measured and paid at the quoted price only.
- c) The net rate or prices in the original Tender shall determine the **rate for the items altered**, provided if omissions / additions vary the conditions under which any remaining items of works are carried out, the prices for the same shall be valued under (b) hereof.
- d) For extra items/Substitute items where the description of items is different from that of any tendered item, the following method shall hold good.
- e) Where the extra item works are not of similar character and/or executed under condition as aforesaid or where the omissions vary, the conditions under which any remaining items of works are carried out or if the amount of any omission or additions relative to the amount or the whole of the Contract works or to be any part thereof shall be such that in the opinion of the **Architect/Consultant** the net rate or price contained in the priced Schedule of Quantities or tender or for any item of the works involves loss or expenses beyond that contemplated by the Contractor or is by reason of such omission or addition rendered or inapplicable, the **Architect/Consultant** shall fix such other rate or price as in the circumstances he shall think and proper on the basis of actual rate analysis cost of work involved plus fifteen percent (15%)towards Contractor's overheads and profits, which shall be final and binding on the Contractor.
- f) The measurement and valuation in respect of the Contractor shall be completed within the "period of Final Measurement" or within three months of the completion of the Contract works as defined under Clause for "Certificate of Virtual Completion".
- g) The Contractor shall submit the claims for Deviated items and Extra items as per Performa annexed hereto.

5.3. MEASUREMENTS

5.3.1. **MEASUREMENT OF WORKS:**

a) The **Architect/Consultant** shall from time to time intimate the Contractor that he requires the works to be measured, and the Contractor shall forthwith attend or send a Seal with signature of the bidder

- construction of baroda swarojgar vikas sansthan (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA qualified agent to assist the **Architect/Consultant's representative** in taking such measurements and calculations and to furnish all particulars or give all assistance required by either of them.
 - b) Should the Contractor omit to attend or neglect or omit to send such agent, then the measurements taken by the **Architect/Consultant** or approved by him shall be taken to be the correct measurements. The works shall be measured according to the mode of measurements specified in the Contract documents and, where no mode is specified, as per the latest edition of relevant I.S. Codes.
 - c) A certain percentage of measurements will be checked/test checked by the Bank as the case may be for each trade, and for this the contractor has to render all necessary assistance and co-operation.
 - d) The Contractor or his Agent may at the time of measurement take such notes and measurements as he may require.
 - e) All authorized extra works: omissions and all variations made without the **Architect/Consultant's** knowledge, but if subsequently sanctioned by the Bank in writing, shall be included in such measurements.

5.3.2. MODE OF MEASUREMENT

- a) The mode of measurement for this contract shall be on an item rate basis and shall include all quantities specified in the Schedule of Quantities of this tender/ contract. It shall be further deemed that all variations and deviations if specifically agreed to in writing shall also form part of this tender/ contract and shall be subject to measurements. All payments released to the Contractor shall be subject to verification of quantities on the basis of the mode of measurements herein stated.
- b) If the mode of measurement for any or all item is not specified in the contract, latest relevant IS. Code will prevail.
- c) The Contractor shall give due notice to the Bank/ Architect/Consultant in writing whenever any work is to be concealed or made inaccessible, in order that the work may be inspected and correct measurements are recorded before such concealment, in default whereof the same shall be at the option of the Architect/Consultant/ Bank to either open up for measurement at the Contractor's expense or no allowance shall be made for such work.

5.4. PAYMENTS & CERTIFICATION

5.4.1. CERTIFICATE & PAYMENT:

a) The Contractor shall be entitled for periodic Interim Certificates for work done of a minimum value as specified in Appendix hereto to be issued by the Architect/Consultant to the Contractor, and within stipulated number of days for ad hoc payment (if allowed) and for full settlement of the bill as indicated in appendix to General Condition of Contract hereto, subject to work being executed in accordance with this Contract and scrutiny by the Bank. The Retention at the given percentage rate of the value of certified work as indicated in the appendix subject to the specified limit shall be deducted from running bills. The Contractor shall be entitled under the Certificate to be issued by the Architect/Consultant, to receive payment of 50% of the total retention amount (deducted from all the running account payments) and 100% security amount (2% of the contract amount collected on award of the contract) after

Seal with signature of the bidder

virtual completion and balance 50% of the retention amount at the end of the defects liability period, provided the defects are made good, according to the true intent and meaning hereof after due completion of work. Should any decorative works or painting be deferred on the Instruction of the **Architect/Consultant** under the relevant "Clause for "Suspension of Works", payments for such decorative work or painting shall be made up to the stipulated percentage on completion and the balance at the expiration of 6 months from that date. Provided always that the issue by the **Architect/Consultant** of any certificate during the progress of the works or after their completion shall not have effect as a Certificate of satisfaction or relieve the Contractor from his liability under the clause "Defects after Completion" and within the extent and period provided by the Statute of Limitations.

- b) The **Architect/Consultant** shall have the powers to withhold any Certificate if the works or any part thereof is not carried out to his satisfaction.
- c) The Architect/Consultant may by any Certificate make any correction in any previous certificates, which shall have been issued by him. In the event if it comes to the Bank's notice any omission or corrections required in bill certified by Architect/Consultant, the Bank shall affect necessary corrections and the contractor shall be bound to accept the same. This certificate is particularly essential for settlement and payment of the Final Bill.
- d) The Contractor shall submit interim bills only after working out the appropriate measurements jointly recorded with Architect/Consultant at site in a register and showing the register to Architect/Consultant. This is not only to regulate the correctness of the quantity but also to facilitate expeditious clearing of the bills. The bills shall be submitted in the following perform.

As per tender				Previous Bills	Up-to-Date Bills		Remarks
Tender Item No.	Brief Description	Qty Unit	Rate/unit	Qty Unit	Qty Unit	Amt. Rs. /Unit	

Note: If any part/reduced rate is proposed by the Contractor (recommended by Architect/Consultant) the same should be brought out in the remarks column along with reasons.

e) The Bank shall carry out test checking of measurement as and when required. If agreed by the Bank in writing, the Contractor shall be paid for **Supply** of major items and materials – (75%) of value of material or item rate on pro rata basis against delivery of materials at site -whichever is lower, on a Certificate, issued by the **Architect/Consultant**, in regard to quantity and, in conformity with the Contract Specifications. However, this advance will be given to the contractor against the stamped undertaking as per the Performa E in Annexure. On payment of (75%) for supply of materials and items, the property in goods shall vest in the Bank and the contractor will keep it in his custody indemnifying the Bank against any damage, loss,

- f) The final bill shall be submitted by the Contractor within One month of Virtual Completion Certificate received by the Contractor duly endorsed by the Architect/Consultant and the Architect, and such bill shall be settled and certified for payment by the Architect/Consultant within four weeks of the receipt of the Certificate of payment from the Architect/Consultant.
- g) Payments upon the Architect/Consultant's Interim certificate shall be made within a period mentioned in the appendix as "Period of Honoring of Interim Certificates" after such Certificates have been received and accepted by the Bank. The Bank shall make payment upon the Architect/Consultant's Final Certificate within a period of Four weeks from the date of its receipt and acceptance of the certificate.
- h) The Contractor shall submit Performa (A) and (B) serially numbered with dates for all extra/ deviated items of work.
- i) The contractor shall, without fail, submit along with his R.A. Bills/ Final Bills test certificates as specified.
- j) Running Account Bills (R.A. Bills)/Final Bill received without the test certificates duly approved by **Architect/Consultant** shall be returned to the Contractor for the reason of the same being not submitted duly.

5.4.2. Adhoc payment for INTERIM BILLS:

No Adhoc payment will be paid to the Contractor on interim bills unless expressly agreed by the Bank or architect. It is applicable only for the circumstances in case the work will stopped due to any genuine reason and in that position bank / architect will be the final decision maker for approval of adhoc payment.

5.4.3. CERTIFICATE FOR PAYMENT TO CONTRACTOR:

The Contractor's bills will be submitted to Bank through the **Architect/Consultant** for payment as per Perform a enclosed for Interim Bill Certificate and final Certificate. The Architect/Consultant in confirmation that the work has been carried out satisfactorily as per detailed drawings and specifications will endorse and certify the bill.

5.4.4. CERTIFICATE OF VIRTUAL COMPLETION OF WORKS:

- a) The Contractor shall report in writing to the Architect/Consultant, in the form of a Certificate as per Performa 'D' annexed hereto as and when the works are completed in all respects. The Architect/Consultant shall after the verification of the works and in Consultation with Bank issue to the Contractor a certificate to be called "Virtual Completion Certificate", a copy whereof shall be submitted to the Bank to enable them to take possession of the completed works.
- b) The works shall not be considered as completed till the Architect certifies in writing that all the work including those mentioned in **the snag list** prepared jointly with Architect/Consultant/Bank prior to the acceptance of the Virtual Completion. The defect liability period shall commence only from the date of issue of such certificate.

5.4.5. LIEN ON SUMS PAYABLE TO THE CONTRACTORS

Any sums of money due and payable to the Contractor including any deposits returnable to them under this Contract may be withheld or retained by the Bank, against any claim of the Bank against the contractor in respect of any sums of money due under this contract or any other contract made by the contractor with the Bank, but limited to the amount of Bank's claim and the Bank shall always have a lien upon the money so withheld or retained as such by the Bank until appropriated towards such claim. The contractor shall not be entitled to claim any interest or damages whatsoever on such retained or appropriated sum.

5.5. MOBILISATION ADVANCE:

- 5.5.1. On written application from the Contractor, the Bank may grant mobilization advance up to 10% of the amount of accepted tender. The mobilization advance will be released against production of Bank Guarantee for like amount. The advance shall be released after Contractor satisfies **Architect/Consultant** with production of documentary evidence that this amount of Mobilization Advance shall be used for procurement of material/equipment/ labor for the work. The advance shall attract simple interest at the rate of (15%) per annum. The advance shall be secured by a Bank Guarantee from a Scheduled Bank (other than the Bank) for the amount of mobilization Advance plus interest at the rate of 15% per annum (in approved Performa), which will be recovered in the manner described hereinafter.
- 5.5.2. The amount of mobilization advance which may be given to the Contractor shall be at the sole discretion of the Bank.
- 5.5.3. The mobilization advance shall be utilized by the Contractor for the purpose of this contract only and for no other purpose.
- 5.5.4. 100% recovery of the mobilization advance and of interest there on shall be made by deduction from the Contractor's next running account bills.
- 5.5.5. If at any time the Contractor fails to execute the contract to the satisfaction of the Bank for any reason whatsoever the Bank shall be entitled to recall forthwith the entire amount so advanced with interest, cost and legal expenses, etc. and/or recover the whole balance amount as the case may be from the bill if any, payable to the Contractor or by enforcing the Bank guarantee at the discretion of the Bank.

5.6. COMMENCEMENT OF WORK

The contractor shall be allowed admittance to the site on the "date of Commencement" on submission of the valid tamper-proof photo Identity Card (and/or in any other form), duly endorsed by the Contractor, for all their labor, and staff in accordance with the Banks prevailing security requirement.

5.6.1. The Contractor shall commence work forthwith or within the mobilization period defined in the Work order or within the maximum period of15 days, whichever is later, from the date of receipt of Work Order and shall regularly proceed with the work and ensure to complete same on or before the "day of Completion" stated in the Appendix subject nevertheless to the provisions for extension of time hereinafter contained. Until the site is partly / fully handed over to the Contractor, the commencement of work shall include off-site activities including planning, procurement of materials shop drawings, manufacture/fabrication, interaction with Architect/Consultant / other contractors etc.

5.7. DATE OF COMPLETION:

- 5.7.1. The entire work shall be completed in all respects including testing within the period of 7- months from the date of commencement.
- 5.7.2. Time is the essence of the Contract.
- 5.7.3. The work shall not be considered as complete until the **Architect/Consultant** have certified virtual completion in writing. The defects liability period shall commence from the date of such certificate.
- 5.7.4. During the period of Contract, the Contractor shall maintain progress on the basis of the programmed initially agreed to by **Bank/ Architect/Consultant** and later updated from time to time in consultation with **Bank/Architect/Consultant** to suit the overall project schedule and prevailing site conditions.

5.7.5. **DELAY AND EXTENSION OF TIME:**

- a) If in the opinion of the **Bank** the works be delayed
 - i) by force majeure or
 - ii) by reason of any exceptionally inclement weather or
 - iii) by reason of proceedings taken or threatened by the dispute with adjoining or neighboring Banks or public authorities arising otherwise than through the Contractor's own default or
 - iv) by the works or delays of other Contractors or tradesmen engaged or nominated by the Bank or the **Architect/Consultant** and not referred to in the Schedule of Quantities and/or Specifications or
 - v) By reason of the Architect/Consultant's instructions.
 - vi) by reason of civil commotion, legal combination of strike or lock-out affecting any of the building traders or in consequence of the Contractor not having received in due time necessary instructions from the **Architect/Consultant** for which he shall have specifically applied in writing, ahead of time, giving the Consultant reasonable time to prepare such instructions, the Bank shall make a fair and reasonable extension of time for completion of the Contract works. In case of such strike or lock-out, the Contractor shall, as soon as may be, given written notice thereof to the **Architect/Consultant**, but the Contractor shall nevertheless constantly use his endeavors to prevent delay and shall do all that may be required to the satisfaction of the **Architect/Consultant** to proceed with the work.
- b) The Contractor shall proactively take all practical steps to avoid or reduce any delay in the execution and completion of the works arising out of
 - i) Force Majeure
 - ii) Exceptionally inclement weather
 - iii) Loss and damage by fire and earthquake
 - iv) Civil commotion, lockout, strike etc.
 - v) Delay on the part of the nominated Sub-Contractor or nominated supplier.
 - vi) Delay on the part of the other Contractors employed by the Bank.

5.8. SUSPENSION OF WORKS:

The **Architect/Consultant** may in an extreme case and in prior consultation with the Bank suspend works if the quality or safety of the works are likely to be compromised due to heavy rains, natural calamities etc. The **Architect/Consultant** may grant such an extension of time with the approval of the Bank as may be justified by such a delay

construction of baroda swarojgar vikas sansthan (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA in the works. The Contractor shall not be entitled to any compensation on account of such delay.

5.9. WORK AT NIGHT:

5.9.1. If the Contractor is required to work at night in order to complete the work within the Time Schedule, the Contractor shall provide and maintain at his own cost sufficient lights to enable the work to proceed satisfactorily without danger. Approaches to the site also shall be sufficiently lighted by the Contractor. No extra payments will be made for night work. Prior intimation and approval should also be taken from Architect/Consultant. Also, if needed, the contractor will be bound to visit the site upon the call of the Architect.

5.10. WORK ON NATIONAL HOLIDAY:

5.10.1. No work shall be done on national holidays that may be notified by the Bank without the specific sanction in writing of the **Bank/ Architect/Consultant**.

6. **PERFORMANCE**

6.1. GENERAL

6.1.1. **INDEPENDENT CONTRACTOR**

a) The Contractor agrees to perform this Contract as an independent Contractor and not as a sub- Contractor, agent or Employee of the Bank.

6.1.2. **ASSIGNMENT OR SUB-LETTING**:

a) The whole of the works included in the Contract shall be executed by the Contractor and the Contractor shall not directly or indirectly transfer, assign or underlet the Contract or any part/ share thereof or interest therein, nor shall he take a new partner, without the written consent of the **Architect/Consultant/ Bank** and no undertaking shall relieve the Contractor from the full and entire responsibility of the Contract or from active superintendence of the works during their progress.

b) **Nominated Sub-contractors:**

- i) All specialists, merchants, tradesmen and others executing any work or supplying and fixing any goods for which prime cost prices or provisional sums are included in the Schedule of Quantities and/or Specifications who may be nominated or selected by the Architect are hereby declared to be Sub-contractors employed by the Contractor and are herein referred to as nominated Sub-contractors. No nominated Sub-contractor shall be employed on or in connection with the works against whom the contractor shall make raceable objection or (Save where in the Architect and Contractor shall otherwise agree) who will not enter into contract provided:
- ii) That the nominated Sub-contractor shall indemnify the contractor against the same obligations in respect of the Sub-contract as the contractor is under in respect of this contract.
- iii) That the nominated Sub-contractor shall indemnify the contractor against claims in respect of any negligence by the Sub-contractor, his servants or agents or any misuse by him or them of any scaffolding or other plant, the property of the contractor or under any Workmen's Compensation Act in force.
- iv) Payment shall be made to the nominated Sub-contractor within **15 days** of his receipt of the Architect's certificate provided that before any certificate is issued the contractor shall upon request furnish to the Architect proof that all nominated Sub-contractor's accounts included in previous certificates have been duly discharged; in default whereof the Bank may pay the same upon a certificate from the Architect and deduct the amount thereof from any sums due to the contractor.

6.1.3. **OBTAINING INFORMATION**:

a) No claim by the Contractor for additional payment will be entertained which is consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the works, nor will any misunderstanding or the obtaining of

construction of baroda swarojgar vikas sansthan (rseti) building at ahwa, district dang, gujarat, india incorrect information or the failure to obtain correct information relieve him from any risks or from the entire responsibility for the fulfillment of the contract.

6.1.4. THE SETTING OUT:

a) The Contractor shall at his own expense, set out the works accurately in accordance with the plans. The Contractor shall be solely responsible for the true and perfect setting out of the works, and for the correctness of the position, levels, dimensions and alignment of all parts thereof. If at any time any errors appear during the progress or on completion of any part of the work, the Contractor shall at his own cost rectify such error if called upon to the satisfaction of the **Architect/Consultant**. The Bank and/or its representatives shall time to time inspect the work, but such inspections shall not exonerate the Contractor in any way from his obligations to remedy any defects, which may be found to exist at any stage of the work or after the same is completed.

6.1.5. **PERFORMANCE**

- a) The Contractor shall be fully and solely responsible for proper, safe and efficient design and performance of his equipment and installation, in conformity with drawings and parameters and specifications stipulated in the Contract documents.
- b) In case the Contractor finds that anything contained in drawings, specifications or given parameters will not ensure such performance and compliance with best trade practices and codes, rules and regulations laid down by Authorities, he shall bring such matters to the attention of the **Architect/Consultant** and shall follow their instructions.
- c) The contractor shall also guarantee that the performance of the various materials and items individually shall not be less than specified ratings when working under operating conditions given for the respective items.

6.1.6. **EXECUTION OF WORK:**

- a) The whole of the work as described in the Contract (including the Schedule of Quantities, Preamble, the Specifications and all drawing pertaining thereto) and as advised by the **Architect/Consultant** from time to time is to be carried out and completed in all its parts to the entire satisfaction of the **Architect/Consultant**.
- b) Any minor details of manufacture, fabrication and installation which are obviously and fairly intended, or which may not have been referred to in this Contract, but which are usual in sound interiors execution practice and essential to the work, are to be included in the Contract. Rates quoted in the Schedules shall be inclusive of all freights, taxes, such as Octroi, Sales Tax, Excise Tax, Work Contract Tax, Royalties, VAT& GST etc. as well as transportation to execute the Contract as per the rules and regulations of Local Bodies, State Government and the Government of India, and to the full intent of tender documents.
- c) Following shall be deemed to be provided for in the quoted rates:
- i) Labor for constructing, fixing, finishing, carrying, cleaning, making good etc.
- ii) Framework, ladders, ropes, nails, spikes, tools, material and workmanlike protection from weather, temporary supports.
- iii) Covering for the works during inclement weather or strikes or whenever directed, as Seal with signature of the bidder

- iv) All temporary canvass, lights, tarpaulin, barricades, water-sheets etc.
- v) All such temporary weatherproof sheds at such places and in a manner approved by the **Architect/Consultant** for the storage and protection of materials against the effects of Sun or rain.
- vi) All minor civil works like breaking and making good of masonry walls to original condition for passage of cables, cable trays, etc.
- vii) Provision of necessary frames (MS/wooden) for dressing up of wall/RCC openings and for installation of Fans etc. if instructed by **Architect/Consultant**. Drawings for framework to be approved from **Architect/Consultant**.
- viii) The rate quoted by the Tenderer in the schedule of probable quantities will be deemed to be for the finished work inclusive of the cost of providing the above items.

SITE MANAGEMENT

6.1.7. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY:

- a) The Contractor shall provide everything necessary for the proper execution of the works according to the true intent and meaning of the Drawings, Specifications and Schedule of Quantities taken together whether the same may or may not be particularly shown or described therein, provided that the same can be inferred wherefrom and if the Contractor finds any discrepancy in the Drawings or between the Drawings, Specifications and Schedule of Quantities he shall immediately refer the same in writing to the Architect/Consultant, who shall decide which shall be followed, and his decision shall be final and binding on all parties. The Contractor shall provide ground for himself and fresh water and power for carrying out of the works at his own cost.
- b) The Bank shall not charge the Contractor for his own un -rented ground but shall on no account be responsible for the expenses incurred by the Contractor for hired ground.
- c) The Contractor shall always provide and maintain all measuring and testing instruments for properly carrying out the work and for the use of the **Architect/Consultant**/Bank, including providing skilled attendants as required.
- d) The Contractor shall supply, fix and maintain at his cost during the execution of any works all the necessary equipment, materials and lighting required by night and as well as by day for proper execution of work. The contractor shall take down and remove any or all such unwanted waste materials, debris etc. as occasion shall require or when ordered to do so, and shall fully reinstate and make good all matters and things described during the execution of the works, to the satisfaction of the Architect/Consultant/ Bank

6.1.8. FACILITIES TO OTHER CONTRACTORS

a) The Contractor shall give full facilities and co-operation to other Contractors employed by the Bank and shall afford them reasonable opportunity for the execution of their works and for properly connecting and co-coordinating their works with the work of the other Contractors. The decision of the **Architect/Consultant** on any points of dispute between the various Contractors shall be final and binding on all parties concerned.

6.1.9. **STORES AT SITE**:

a) The Contractor shall be allotted space / existing rooms on site subject to availability. The Contractor shall make his own arrangements to enclose, secure and guard the space allotted to him. Wherever there may be materials, which are likely to deteriorate by the action of the sun, rain or other elements, all such materials, tools etc shall be duly protected by the Tenderer from damage by weather or any other cause. All such stores and yards shall be cleared away and ground left in good and proper order, on completion of this Contract unless otherwise expressly mentioned herein.

6.1.10. ELECTRIC POWER FOR INSTALLATION

- a) The Contractor shall be given a temporary electrical connection at one location at or below ground level to be decided by the **Bank**. The Contractor shall, at his own cost, provide a sub-meter, cabling and wiring and switchboards complying with all laws, rules and regulations in force and ensuring the safety of everyone working or visiting on site.
- b) The Contractor shall regularly reimburse cost for electricity consumed to the Main Contractor at the same tariff rates as charged by the Electric Supply Company.

6.1.11. GENERAL CONDITIONS OF SUPPLY OF MATERIALS FOR EXECUTING WORK

The successful Tenderer before placing the orders or before supplying shall seek clearance in a meeting with the **Bank/Architect/Consultant**. The final list of supply of materials shall however be made at the time of signing of the contract by the Bank in consultation with the **Architect/Consultant** and the successful Tendered. The Contractor shall then strictly adhere to these approved lists of makes and materials and proceed to supply the same. If any deviation and/or for any unforeseen reasons the makes or materials are to be altered, the contractor shall obtain the approval from the **Bank/Architect/Consultant** in writing and then only he may proceed to supply.

6.1.12. REMOVAL OF ALL OFFENSIVE MATTERS:

a) All soil, filth or other matter of an offensive nature taken out of any trench, sewer, drain or other place shall not be deposited on the surface, but shall be at once carried away by the Contractor and disposed of as per the rules and regulations of the Local Authorities concerned.

6.1.13. UNFIXED MATERIALS:

a) When any materials intended for the works shall have been placed at site by the Contractor, such materials shall not be removed there from (except for the purpose of being used on the works) without the written authority of the Architect/Consultant and when the Contractor shall have received payment in respect of any Certificate in which the Architect/Consultant shall have stated that he has considered the value of such unfixed materials on the works, such materials shall become the property of the Bank, and the Contractor shall be liable for any loss or damage to any such materials.

6.1.14. REMOVAL OF IMPROPER WORK AND MATERIALS:

a) The **Architect/Consultant** shall, during the progress of the works, have power to order

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b) If the correcting works are not done in accordance with the Contract the **Architect/Consultant**, in consultation with the **Bank**, may allow such work to be got done through other parties at Contractors risk and cost and in that case they may make allowance for the difference in value together with such further allowance for damages to the Bank as in their opinion may be reasonable.

to employ and pay other persons to carry out the same and all expenses consequent there on or incidental thereto shall be borne by the Contractor, and shall be recoverable from him on behalf of the Bank or may be deducted by the **Architect/Consultant** from

6.1.15. CLEARING THE SITE OF WORKS:

a) The Contractor shall clear site of works as per the instructions of the Architect/Consultant. The site of works shall be cleared of all men, materials, sheds, etc. belonging to the Contractor. The site shall be delivered in a clean and neat condition as required by the Architect/Consultant within a period of one week after the job is completed. In case of failure by the Contractor, the Bank under advice of the Architect/Consultant will have the right to get the site cleared at the risk and cost of the Contractor to the satisfaction of the Architect/Consultant.

6.1.16. OCCUPATION OF PARTIALLY COMPLETED WORKS BY THE BANK:

any money due or that may become due to the Contractor.

a) The Bank shall be entitled to and at liberty to occupy even the partially completed works or any portion thereof by themselves or through their agents and servants if they so desire, in which event, necessary extension of time on this account for completing the works shall however be granted to the Contractor, but he shall have no claim for any compensation whatsoever due to the delay involved in completing works. Both the Bank and the Contractor will work out the repercussions on the insurance Clause mentioned above to mutual satisfaction safeguarding each other's interest.

6.1.17. PREPARATION FOR OCCUPATION AND USE ON COMPLETION:

a) On completion of the work, the Contractor shall inform the **Architect/Consultant** in writing that he has finished the work, and it is ready for the **Architect/Consultant's/Bank's** inspection. The Contractor shall clean all his works and all the rooms under his charge. He will leave the entire work neat and clean and ready for occupation and to the satisfaction of the **Architect/Consultant**.

6.1.18. KEEPING THE AREAS AND ACCESS ROADS CLEAN:

- a) The Contractor shall be required to always maintain the site and the building areas in a neat and clean condition to the satisfaction of the **Architect/Consultant**. Debris to be removed every 2 days.
- b) The Contractor shall also be required to keep all access roads to the site and within the Seal with signature of the bidder

construction of baroda swarojgar vikas sansthan (rseti) building at ahwa, district dang, gujarat, india site free from all obstructions, material droppings etc. to the satisfaction of the Consultant and local authorities.

6.1.19. COVERING UP OF WORKS:

a) The Contractor shall cover up and protect the works from the weather and shall suspend all wet operations during weather which, in the opinion of **Architect/Consultant**, will be detrimental to the works.

6.1.20, MEASUREMENT TO BE RECORDED BEFORE WORK IS COVERED UP:

a) The Contractor shall take joint measurements with the Architect/Consultant before covering up or otherwise placing beyond the reach of measurement any items of work. Should the Contractor neglect to do so, the same shall be uncovered at the Contractor's expense or in default thereof, no payment or allowance shall be made for such work or the materials with which the same was executed.

6.1.21. **SITE SURVEY**:

a) On award of the works, the Contractor shall immediately survey the complete site and record his findings on civil works and services connected with his works and submit the report in duplicate. No extra payment shall be made for this work.

6.1.22. LABOR HUTMENTS:

a) The Contractor shall not be allowed to put up any hutment/temporary structure of accommodating his labor/staff. He shall be required to make these arrangements elsewhere at his own cost. However, if the rules of local authorities so permit and subject to the contractor arranging for such permission, some space at site which will not come in the way of the permanent construction, temporary construction facilities and offices may be provided to the contractor at the discretion of the Bank for essential/core staff engaged on emergency or essential services round the clock work with proper sanitary facilities.

6.2. STAFF MANAGEMENT

6.2.1. INFORMATION TO BE SUPPLIED BY THE CONTRACTOR:

The Contractor shall furnish the Bank the following:

- a) Detailed industrial statistics regarding the labor employed by him, etc.
- b) The power of Attorney, name and signature of his authorized representative who will be in charge for the execution of the work.
- c) A list of technically qualified persons Employed by him for the execution of the work.
- d) The total quantity and quality of materials used for the work

6.2.2. **APPOINTMENT OF ENGINEERS:**

a) The Contractor shall appoint a Senior Engineer to the satisfaction of the Architect/Consultant/Bank. The Architect/Consultant/Bank shall be entitled to approve or disapprove without assigning reasons the appointment of such Engineer proposed by the Contractor. This condition shall be reckoned as being the essence of the contract and its breach shall make the Contract revocable at the option of the Bank. The Senior Engineer shall be assisted by a number of other Engineers and Supervisors in the respective disciplines as required for the smooth and satisfactory execution of the

- b) The Engineer so appointed shall always be available when required by **Architect/Consultant/Bank** to attend all site/office meetings to discuss all aspects of the Contract including design, administration, planning, fabrication, installation, commissioning, testing and defects liability maintenance as well as site co-ordination with all Contractors/Agencies.
- c) The Senior Engineer shall not be required to be present full-time at site but shall be available at all times when required by **Architect/Consultant** to attend site/office meetings to discuss any aspect of the contract.

6.2.3. SITE ENGINEER:

a) Successful Tenderer will have to, before receiving work order, select suitable Engineer to be interviewed by Architect/Consultant/Bank. It will be the responsibility of the selected engineer to ensure that the minutes of site meetings are kept up-to-date. Contractors have to be up to date for each site meeting to be held.

6.2.4. CONTRACTOR'S SUPERINTENDENCE & REPRESENTATIVE ON WORKS:

- a) The Contractor shall give all necessary superintendence during the execution of the works and as long thereafter as the **Architect/Consultant** may consider it necessary until the expiration of the "Defects Liability Period" stated in the Appendix hereto.
- b) The Contractor shall maintain and be represented on site, at all times while the work is in progress, by a responsible and efficient Engineer In-charge, approved by the **Architect/Consultant** and who must thoroughly understand all the trades entailed and be constantly in attendance, while the men are at work. Any directions, explanations, instructions or notices given by the **Architect/Consultant** to such Engineer In-charge shall be deemed to be given to the Contractor and shall be binding as such on the Contractor. The Engineer-in-charge shall be thoroughly conversant with the English Language and should be able to read, write and speak English.

6.2.5. **DISMISSAL OF WORKMEN**:

a) The Contractor shall on the request of the Architect/Consultant/ Bank immediately dismiss from the works any person employed thereon who may, in the opinion of the Architect/Consultant, be unsuitable or incompetent or who may misconduct himself and such person shall not again be employed or allowed on the works without the permission of the Architect/Consultant/Bank.

6.2.6. OTHER PERSONS ENGAGED BY THE BANK:

a) The Bank reserves the right to use the premises and any portion of the site for the execution of any work not included in this Contract which he may desire to have carried out by other persons, and the Contractor has to allow all facilities for the execution of such work, but is not required to provide any plant or material for the execution of such work, except by special arrangement with the Bank. Such work shall be carried out in such a manner as not to impede the progress of the works included in the Contract, and the Contractor shall not be responsible for any damage or delay which may happen to or be occasioned by such work.

6.3. SAFETY MANAGEMENT

6.3.1. REPORTING OF ACCIDENTS TO LABOR:

The Contractor shall be responsible for the safety of persons employed by him on the works and shall report serious accidents to any of them, however and wherever occurring on the works, to the **Architect/Consultant** and Bank who shall make every arrangement to render all possible assistance. This shall be without prejudice to the responsibility of the Contractor under the Insurance Clause of the General Conditions.

6.3.2. Use of Explosives:

Safety codes

Explosives shall not be used on the works by the contractor without the written permission of the **Architect/Consultant** and then only in the manner and to the extent to which He has prescribed. When explosives are used, the same shall be stored in a special magazine to be provided by and at the cost of the contractor, who shall be liable for all damages, loss or injury for non-compliance with all the statutory obligations.

6.3.3. Scaffolds

- a) Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except in the case of short duration work, which can be done safely from ladders. When a ladder is used, it shall be of rigid construction made either of good quality wood or steel. The steps shall have a minimum width of 450mm and a maximum rise of 300mm. Suitable hand holds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper than 1/4 to 1 (1/4 horizontal to 1 vertical)
- b) Scaffolding or staging more than 4 m. above the ground floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly bolted, braced or otherwise secured, at least 1m. above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be fastened to prevent it from swaying from the building or structure.
- c) Working platforms, gangways and stairway shall be so constructed that they do not sag unduly or unequally and if the height of the platform, gangway or stairway is more than -4-m. Above ground level or floor level, they shall be closely boarded and shall have adequate width and be suitably fenced as described in (ii) above.
- d) Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 m.
- e) Wherever there are open excavations in ground, they shall be fenced off by suitable railing and danger signals installed at night so as to prevent persons slipping into excavations.
- f) Safe means of access shall be provided to all working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. in length while the width between said rails in rung ladder shall in no case be less than 290mm for ladder up to

construction of baroda swarojgar vikas sansthan (RSETI) building at ahwa, district dang, gujarat, india and including 3 m. in length. For longer ladders this width shall be increased at least 20mm. for each additional meter of length.

- g) A sketch of the ladders and scaffolds proposed to be used shall be prepared and approval of the Engineer obtained prior to construction.
- h) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use.

6.3.4. OTHER SAFETY MEASURES:

- a) All personnel of the Contractor working within the site shall be provided with safety helmets. All welders shall wear welding goggles while doing welding work and all metal workers shall be provided with safety gloves. Persons employed on metal cutting and grinding shall wear safety glasses.
- b) Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.

6.3.5. **PERCERAL SAFETY EQUIPMENTS:**

- a) All necessary personnel safety equipment as considered adequate by the Engineer should be kept available for the use of the persons employed on the site and maintained in a condition suitable for immediate use, and the Contractor should take adequate steps to ensure proper use of equipment by those concerned.
- b) Workers employed in mixing asphalt materials, cement and lime mortar shall be provided footwear and protective goggles.
- c) Those engaged in whitewashing and mixing or stacking of cement bags or any materials, which are injurious to the eyes, shall be provided with protective goggles.
- d) Those engaged in welding works shall be provided with welder's protective eyesight lids.
- e) Stonebreakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- f) When workers are employed in sewers and manholes which are in use, the Contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into manholes and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
- g) The Contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Whenever men above the age of 18 are employed on the work of lead painting, the following precautions should be taken:
- h) No paint containing lead or lead products shall be used except in the form of paste or ready-made paint.

- i) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scraped.
- j) Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of the work.
- k) When the work is done near any public place where there is risk of drowning all necessary equipment's should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.
- I) Adequate washing facilities should be provided at or near places of work.

6.3.6. **HOISTING MACHINES**

- a) Use of hoisting machines and tackle including their attachments anchorage and supports shall confirm to the following standards or conditions:
- i) This shall be of good mechanical constructions, sound material and adequate strength and free from patent defect and shall be kept in good repair and in good working order.
- ii) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.
- iii) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years shall oversee any hoisting machine including any scaffolding winch or give signals to operator.
- iv) In case of every hoisting machine and of every chain ring hook, shackle, shovel and pulley block used in hoisting or as means of suspension of the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond its specified capacity.
- v) In case of departmental machines, the safe working load shall be notified by the engineer as regards contactor's machines, the contractor shall notify the safe working load of the machine to the engineer whenever he brings any machinery to site of work and get it verified by the engineer concerned.
- vi) Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards, hoisting appliances should be provided with such means as will reduce to the minimum of the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations that are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials that are good conductors of electricity.
- b) These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance

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- c) To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the Contractor shall be open to inspection by the Labor Officer, Engineers of the Department or their representatives.
- d) Notwithstanding the above clauses there is nothing in these to exempt the Contractor from the operations of any other Act or Rule in Force in the Republic of India.

6.4. RISK MANAGEMENT

6.4.1. WORK PERFORMED AT CONTRACTOR'S RISK:

The Contractor shall take all precautions necessary and shall be responsible for the safety of the work and shall maintain all safeguards, including providing for guards, proper lights, signs, temporary passages, or other protection necessary for the purpose. All work shall be done at the Contractor's risk, and if any loss or damage shall result from fire or from other cause, the Contractor shall promptly repair or replace such loss or damage free from all expenses to the Bank. The Contractor shall be responsible for any loss or damage to materials, tools or other articles used or held for use in connection with the work. The work shall be carried on and completed without damage to any work or property of the Bank or of others and without interference with the operation of existing machinery or equipment, if any.

6.4.2. CONTRACTOR'S LIABILITY AND INSURANCE

a) From commencement to completion of works, the Contractor shall take full responsibility for the care of the work and for taking precautions to prevent loss or damage to the work to the maximum extent possible and shall be liable for any damage or loss that may arise to the works or any part thereof from any cause whatsoever including causes of fire, lightening, explosion, fire, earthquake, storm, hurricane, floods, inundation, subsidence, landslides, rock slides, riots (excluding civil war, rebellion, revolution and insurrection) or any latent defect or damage and shall at his own cost repair and make good the same so that at all times the work shall be in good order and condition and in conformity in every respect with the requirements of the Contract. **Explanation:**

For the purpose of this condition, the expression "from commencement to completion of works" shall mean the period starting with the date of issue of the work order or date of handing over of site whichever is later and ending with issue of Virtual Completion Certificate. For the purpose of this Insurance clause only, handing over of site shall also include any handing over of space to the Contractor for the purpose of storage of materials and equipment.

b) Without limiting the obligations and responsibilities under this condition, the Contractor shall insure and keep insured the works from commencement to completion, as aforesaid, as increased by 25% of the contract value against the risk of loss or damage from any cause whatsoever including the causes enumerated in the foregoing Clause (a). In the event of there being a variation in the nature and extent of the works, the Contractor shall from time to time increase or decrease the value of the insurance correspondingly. All the premia for the insurance shall be borne and paid by the Contractor. The said insurance shall also provide cover for the removal of debris of the lost or damaged works. The said insurance shall be in the joint names of the Bank and the Contractor, Bank's name being mentioned first in the policies and the Contractor shall deposit with the Bank the said policy or Policies before commencing the work. All money payable by the insurer under such Policy/Policies shall be recovered by the

the installments for the purpose of rebuilding or replacing or repairing the works and/or goods destroyed or damaged as the case may be.

- c) The Contractor shall at all times indemnify and keep indemnified the Bank against all losses, claims, damages or compensation including under the provisions of the payment of the Wages Act 1936, Minimum Wages Act 1948, Bank's Liability Act 1938, Workman's Compensation Act 1923, the Maternity Benefit Act 1961, the Bombay Shops and Establishments Act1947, Industrial Disputes Act 1947, and Contract Labor (Regulation and Abolition) Act 1970 and Employees State Insurance Act 1948, Motor Vehicles Act 1988 or any modifications thereof or under any other law relating thereto and rules made there under from time to time or as a consequence of any accident or injury to any workman or other person in or about the work whether in the employment of the Bank or Contractor or not, and also against all costs, charges and expenses of any suit, action or proceedings whatsoever out of such accident or injury or combination of any such claims.
- d) The Contractor from the time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays. In case of sudden bans, political strikes special care to be taken regarding safety of work executed on site, labours and materials. Contractor shall indemnify the Employer against any possible damage to site i.e. the tile floor, walls, glass, sanitary/plumbing fittings etc along with member of the public in course of execution of the work.
- e) Before commencing the work, the Contractor shall, without limiting his obligations and responsibilities under this condition, insure against any loss of life or injury to any personnel in the employment of Contractor/sub-Contractor/nominated Sub-Contractor. For this purpose, insurance shall be taken by the Contractor /Sub-Contractor. Such insurance shall be taken to include employees/ workmen covered by the Workman's Compensation Act 1923, as well as those employees /workmen not covered by the said Act. Separate insurance policies may be taken for employees/work men covered by Workman's Compensation Act 1923, and employees/ workmen not covered by the said Act. All the premia shall be paid by the Contractor. Policy/Policies taken under this paragraph for the personnel in employment with the Contractor/Sub-Contractor may be in their Bank's names of the Contractor/Sub-Contractor/nominated Sub-Contractors. In the event of any loss or injury to personnel in employment with the Contractor/Sub-Contractor/nominated Sub-Contractors, the Employee and Contractor shall recover directly from the Insurance Company and ensure that payment of the same is made to the affected parties including the Bank. The policy in original shall be deposited with the Bank. However, if the Policy obtained by the Contractor is not project-specific but covers several works, a certified copy of the Policy shall be submitted to the Bank, together with the original which shall be returned after verification.
- f) On acceptance of the tender the Contractor shall in writing and at once inform the Employer and the Architects the names of his accredited representative (specifications) who will be responsible to take instructions from the Architects/Employer. The Contractor will be required to insure by obtaining CAR policy of the work and keep it insured up to one month after the date of taking over the works/installations by the Employer or otherwise in terms of the contract against loss or damage by fire and other usual risks other than the risks accepted in terms of the contract with the General Insurance Corporation of India or its subsidiaries. This CAR policy will be required to submit to bank within -7days from the date of acceptance of work order.
- g) The Contractor shall always indemnify and keep indemnified the Bank against all losses and claims for injuries or damage to any person or any property whatsoever which may arise out of or in consequence of the construction and maintenance of the work and against all claims, demands, proceedings, damages, costs, charges and expenses

whatsoever in respect of or in relation thereto. Before commencing the execution of the works, the Contractor shall without in any way limiting his obligations and liabilities under this condition, insure at his cost and expense against any damage or loss or injury which may be caused to any person or property including the Employee or servants of the Bank and the Consultants and their property by or in the course of the execution of the works. Such insurance to be known as the Third-Party Insurance shall be in a sum equivalent to two percent of the estimated value of the work, subject to the minimum sum of Rupees Five Lacs. The Insurance policy to be obtained by the Contractor shall be deposited by the Contractor with the Bank within seven days of its issue by the insurer.

- h) The Contractor shall provide the Bank with documentary evidence from time to time, that he has taken all the insurance policies mentioned in the foregoing paragraphs and that he has paid the necessary premia for keeping the policies valid till the works are completed and handed over to Bank.
- i) The Contractor shall ensure that similar insurance policies are taken out by his subcontractors or nominated Contractors, if any. The Contractor shall be responsible to the Bank or to any other person for any claim or loss resulting from the failure of the Sub- contractors or nominated Sub-Contractors to obtain such insurance policy. While taking the insurance policies, Contractor should indicate clearly to the insurance companies that policies issued should cover their Sub-Contractors and nominated Sub-Contractors also.
- j) If the Contractor and/or his sub-Contractor or nominated Sub Contractor, if any, shall fail to effect and keep in force the insurance referred to above or any other insurance which he/they may be required to effect under the terms of the Contract, then in any such case, the Bank may, without being bound to effect and keep in force any such insurance policy and pay such premium or premia, as may be necessary for that purpose from time to time and deduct the amount so paid by the Bank from any money due or becoming due to the Contractor recover the same as a debt due from the Contractor.
- k) All Insurance Policies shall be obtained from nationalized Insurance Companies only.
- Without prejudice to any of its obligations and responsibilities under this condition, the Contractor shall, within 30 days from the date of the Work Order and thereafter at the end of each quarter submit a report to the Bank with relevant documentary evidence.
- m) No work shall be commenced by the Contractor unless and until he has obtained the insurance or insurance required to be obtained by him under or by the foregoing clauses and no work shall be carried out or continued by the Contractor unless and until such insurance is current and valid at that time. All the receipts in the original along with two photocopies thereof, for the payment of the premia shall be furnished by the Contractor to the Bank. The original receipts will be returned to the Contractor after verification. The Bank reserves the right for payment for works done subject to fulfillment of this condition and shall instruct the **Architect/Consultant** accordingly.
- n) In the event of any claim for insurance becoming due on account of any eventuality covered by the respective insurance policy/policies, the Contractor shall reinstate the installation, replace the materials or equipment's or pays compensations to the affected personnel/ Employees or their legal heirs without waiting for settlement of the claim from insurance company.
- o) If the Contractor shall not perform and observe any of the duties and obligations devolving upon him hereunder, and such omission or breach by the Contractor shall involve the Bank in any liability tortuous or otherwise and/or loss or damage, the Bank

- construction of baroda swarojgar vikas sansthan (RSETI) building at ahwa, district dang, gujarat, india shall be entitled to the restitution of such loss or damage and shall be entitled to recover the amount of restitution from any moneys due to the Contractor from the Bank under this Contract or any other Contract.
 - p) Upon taking possession of the works under the Contract, the Bank shall take out parallel insurance, to insure all persons who are not the Contractor's or the Sub-Contractor's or the nominated Sub-Contractors or the Project Management Consultant's staff or the agent of the Banks authorized representatives on getting the occupation certificate, the Bank will maintain their own insurance Policy and the Contractors will cease to be responsible for the insurance of Bank's personnel.
 - q) The Contractor shall ensure the validity of the insurance Policies. The Contractors shall hand over the insurance policies to the Bank through the **Architect/Consultant**. Once delays are certified by the **Architect/Consultant**, he shall have to ensure that the insurance Policies are progressively extended.
 - r) The Banks' insurance Policy shall cover the risk for Banks' agents, Consultants, Architect/Consultants etc. appointed by the Bank.
 - s) The Bank shall insure the building in totality on obtaining possession of the building and other structures.

Insurance in respect of damages to persons & property:

- 1. The contractor shall be responsible for all injury to persons, Neighboring Properties, animals or things, and for all structural and decorative damage to property which may arise from the operation or neglect of himself or of any nominated Sub-contractor's employees, whether such injury damage arise from carelessness, accident or any other cause whatever in any way connected with the carrying out of this contract. This clause shall be held to include inter alia any damage to buildings, whether immediately adjacent or otherwise, and any damage to roads, streets, footpaths, bridges or ways as well as all damage caused to the building and works forming the subject of this contract, by frost or other inclemency or whether. The Contractor shall indemnify the Bank from any such injury or damage to persons or property as aforesaid and in any award of compensation or damages consequent upon such claims.
- 2. The Contractor shall reinstate all damage of every sort mentioned in the Clause, so as to deliver up the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.
- 3. The Contractor shall indemnify the Bank against all claims, which may be made against the Bank by any member of the public or other third party in respect.
- 4. anything which may arise in respect of the works or in consequence thereof and shall at his own expense arrange to effect and maintain, Until the virtual completion of the contract, with an approved Office a Policy of Insurance in the joint names of Bank and the Contractor against such risks and deposit such Policy or Policies with the Architect from time to time during the currency of this Contract.
- 5. The Contractor shall similarly indemnify the Bank against all claims which may be made upon the Bank whether under The workmen's Compensation Act or any other statute in force during the currency of this Contract or at common law in respect of any employee

construction of Baroda Swarojgar Vikas Sansthan (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA of the Contractor or any Sub- Contractor and shall at his own expense effect and maintain, until the virtual completion of the contractor, with an approved office, a policy of Insurance in the joint names of the employee and the contractor against such risks and deposits such Policy or Policies with the Architect from time to time during the currency of this Contract.

- 6. The Contractor shall be responsible for anything, which may be excluded from the Insurance Policies above referred to, and also for all the damages to any property arising out of and incidental to the negligent or defective carrying out of this contract. He shall also indemnify the Bank in respect of any costs, charges and expenses arising out of any claim or proceedings and also in respect of any award of or compensation of damage arising there from.
- 7. The Bank with the concurrence of the Architect shall be at liberty and is hereby empowered to deduct the amount of any damage, compensation, costs, charges and expenses arising or occurring from or in respect of any such claim or damage from any sum or sums due or become due to the contractor.

Fire Insurance:

- 1. The Contractor shall at the time of signing the Contract, Insure the works and keep them Insured until the virtual completion of the contract, against losses or damages by fire, as approved by the Architect, in the joint names of the Bank and the Contractor (the name of the former being placed first in the policy) for the full amount of the contract and for any further sum being allowed to the Contractor as an authorized extra. Such a policy shall cover the property or the Bank only, fees for assessing the claim and in connection with his services generally therein and shall not cover any property of the contractor or of any sub-contractor of the Bank. The contractor shall deposit the policy and receipts for the premiums of the same with the Architect within Ten days of the signing the contract or on receipt of the Work order, whichever is earlier unless otherwise instructed by the Architect. In default of the contractor insuring as provided above, the Bank or the Architect on his behalf may so issue any may deduct the premium paid for any money due to the contractor. The contractor shall as soon as the claim under the policy is settled, or the work reinstated by the insurance office, should they elect to do so, proceed with all due diligence with the completion or the work in the same manner as though the fire had not occurred and in all respects under the same conditions of the contract. The contractor shall be entitled to such extension of the time for completion as the Architect deems fit.
- 2. The amount so due as aforesaid shall be total value of the works duly executed and of the contract materials and goods delivered upon the site for use in the work up to and including a date not more than seven days prior to the date of the said certificate less the amount to be retained by the Bank (As hereinafter provided) and loss any installment, previously paid under this clause. Provided that such certificates shall only include the value of the said materials and goods as and from time they are properly and not prematurely brought upon the site and then only if properly stored and/or protected weather.)

7. FAILURE OF PERFORMANCE

7.1. DAMAGES FOR NON-COMPLETION:

7.1.1. If the Contractor fails to complete any or all the works by the date/s named in the relevant clauses for "Date of Completion" and "Extension of Time" and if the Architect/Consultant shall certify in writing on or before the date of issue of the Certificate for the last payment to which the Contractor may become entitled hereunder that the works could have been completed by the date or within the said extended time, then the Contractor shall pay or allow the Bank the sum to be worked out at 1% of Contract value per day to be recovered as Liquidated Damages (and not by way of penalty) for the delay, beyond the said date or extended time, as the case may be, during which the works shall remain unfinished and such damages may be deducted from any moneys due or which may become due to the Contractor. The maximum amount of Liquidated Damages shall be the amount not exceeding Total Security Deposit. The contractor shall be bound to extend the validity of Insurance Cover till such period of completion as to be considered necessary at their cost.

7.2. FAILURE BY CONTRACTOR TO COMPLY WITH CONSULTANT'S INSTRUCTIONS:

7.2.1. If the Contractor after receipt of written notice from the Architect/Consultant in prior consultation with the Bank requiring compliance with such further drawings and/or instructions to remove, fails within seven days to comply with the same, the Architect/Consultant with prior consent of the Bank may employ other persons to execute any such work whatsoever as may be necessary to give effect thereto and all costs incurred in connection therewith shall be recoverable from the Contractor by the Bank on a certificate by the Architect/Consultant as a debt to be deducted by him from any moneys due or to become due to the Contractor.

7.3. DETERMINATION OF CONTRACT:

7.3.1. If the Contractor except on account of any legal restraint upon the Bank preventing the continuance of the works, on account of any of the causes mentioned in Clause "Delay and Extension of time" in the case of a certificate being withheld or not paid when due, shall suspend the works, or, in the opinion of the Architect/Consultant, shall neglect or fail to proceed with due diligence in the performance of his part of the Contract or if he shall more than once make default in the respects mentioned in Clause "Removal of improper work and materials", the Bank through the Architect/Consultant shall have power to give notice in writing to the Contractor. Such notice must signify that it purports to be a notice under the provisions of this clause and must signify the act or defaults on the part of the Contractor upon which it is based. After such notice shall have been given, the Contractor shall not be at liberty to remove from the site of work, or from any ground contiguous thereto, any plant or materials belonging to him which shall have been placed thereon for the purpose of the works, and the Bank shall have lien upon such plant and materials to subsist from the date of such notice being given until the notice shall have been complied with. If the Contractor shall fail, for seven days after such notice has been given to proceed with the works as therein prescribed, the Bank may enter upon & take possession of the works and of all such plant and materials thereon intended to be used for the work, and the Bank shall retain and hold alien upon all such plant and materials until the works shall have been completed under powers hereinafter conferred upon him. If the Bank shall exercise the above power, he may engage any other person to complete the works and exclude the Contractor, his agents and servants, from entry upon or access to the same, except that the Contractor or any person appointed in writing may have access at all times during the progress of the works to inspect, survey and measure the works. Such written appointment or a copy thereof shall be delivered to the Architect/Consultant before the person so appointed comes on to the works, and the Bank shall take such steps as in the opinion of the Architect/Consultant may be necessary for completion of the works, without undue delay or expenses, using for that purpose the plant and materials above mentioned in so far as they are suitable and adaptable to such use. Upon the completion of the work the Architect/Consultant shall certify the amount of the expenses properly incurred consequent on and incidental to the default of the Contractor as aforesaid and in completing the works by other persons. Should the amount so certified as the expenses properly incurred be less than the amount which would have been due to the Contractor upon the completion of the works by him, the difference shall be paid to the Contractor by the Bank, should the amount of the former exceed the latter, the difference shall be paid by the Contractor to the Bank, The Bank shall not be liable to make any further payment or Compensation to the Contractor for or on account of the proper use of the plant for the completion of the works under the provision herein before mentioned other than such payment as included in the Contract. After the works shall have been so completed by persons other than Contractor, under provision herein before contained, the Architect/Consultant shall give notice to the Contractor; to remove his plant and all surplus materials as may not have been used in the completion of the works, from the site. If such plant and materials are not removed within a period of 14 days, after the notice shall have been given, the Bank may remove and sell the same, holding the proceeds, less the cost of the removal and sale, to the credit of the Contractor. The Bank shall not be so responsible for any loss sustained by the Contractor from the sale of the plant in the event of the Contractor not removing it after notice.

7.4. NOTICES:

7.4.1. Notices of the Bank to the **Architect/Consultant** or the Contractor may be served personally or by being left at or sent by registered post to the last known place of abode or business of the party to whom the same is given or in the case of the Contractor by being left on the works. In the case of a company or Corporation, notices may be served at or sent by registered post to the registered office of the Company or Corporation. Any notice sent by registered post shall be deemed to be served at the time when, in the ordinary course of post, it would be delivered.

7.5. TERMINATION OF CONTRACT BY THE BANK

7.5.1. If the Contractor being an individual or a firm, commits any act of insolvency or shall be adjudged as Insolvent or being an incorporated Company shall have an order for Compulsory winding up or applies for voluntary winding up or subject to the supervision of the Court and of the Official Assignee or the Liquidator in such acts of Insolvency or winding up shall be unable within seven days after notice to him requiring him to do so, to show to the satisfaction of the Architect/Consultant that he is able to carry out and fulfill the Contract, and to give security therefore, if so required by the Architect/Consultant or if the Contractor (whether an individual firm or incorporated Company) shall suffer execution to be issued, or shall suffer any payment under this Contract, to be attached by or on behalf of any of the creditors of the Contractor.

OR

Shall charge or encumber this Contract or any payments due or which might become due to the Contractor there under,

OR

If the **Architect/Consultant** shall certify in writing to the Bank that the Contractor **OR**

a) abandoned the Contract,

OR

b) failed to commence the works, or has without any lawful excuse under these conditions

Seal with signature of the bidder

construction of baroda swarojgar vikas sansthan (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA suspended the progress of the works for seven days after receiving from the Consultant written notice to proceed,

OR

c) failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon,

OR

d) failed to remove materials from the site or to pull down and replace work for seven days after receiving from the Consultant written notice that the said materials or work were condemned and rejected by the **Architect/Consultant** under these conditions,

OR

e) neglected or failed persistently to observe and perform all or any of the acts, matters or things by this Contract to be observed and performed by the Contractor for seven days after written notice shall have been given to the Contractor requiring the Contractor to observe or perform the same,

OR

f) To the detriment of good workmanship or in defiance of the **Architect/Consultant** instructions to the contrary sublet any part of the Contract.

Then in any of the said cases the Bank may not withstanding any previous waiver, after giving seven days of notice in writing to the Contractor, determine the Contract but without thereby affecting the powers of the Architect/Consultant or the obligations and liabilities of the Contractor, the whole of which shall continue in force as fully as if Contract has not been determined and as if the works subsequently executed had been executed by or on behalf of the Contractor. And further, the Bank, may enter upon and take possession of the work and all plant, tools, scaffoldings, sheds, machinery, steam and other power, utensils and materials lying upon the premises or the adjoining lands or roads and use the same as his own property or may employ the same by means of his own servants and workmen carrying on and completing the works or by employing any other Contractors or other persons to complete the works, and the Contractor shall not in any way interrupt or do any act, matter or things to prevent or hinder such other Contractor or other person or persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient, the Architect/Consultant shall give a notice in writing to the Contractor to remove his surplus materials and plant, and should the Contractor fail to do so within a period of 14 days after receipt thereof by him the Bank shall sell the same by public auction, or otherwise and shall give credit to the Contractor for the amount realized after deducting there from the costs of removal and sales by the Bank for the values of the said plant and material so taken possession of by the Bank and the expense or loss which the Bank shall have been put to in procuring the works to be completed and the amount, if any, owing to the Contractor and the amount which shall be so certified shall thereupon be paid by the Bank, to the Contractor, or, by the Contractor to the Bank, as the case may be, and the certificate of the Architect/Consultant shall be final and conclusive between the parties. On termination of the Contract, the Contractor shall forthwith remove himself and his workmen from the works site.

7.6. TERMINATION OF THE CONTRACT BY THE CONTRACTOR:

7.6.1. If payment of the amount payable by the Bank under the Certificates of the Architect/Consultant with interest as provided for hereinafter shall be in arrears and unpaid for thirty days after notice in writing requiring payment of the amount with interest as aforesaid shall have been given by the Contractor to the Bank (or if the Bank interferes with or obstruct issue of any such Certificates), or the Bank commits any 'Act of Insolvency', or if the Bank being an individual, or firm shall be adjudged insolvent or

(being an incorporated company)shall have an order made against it or pass an effective resolution for winding up either compulsorily or subject to the supervision of the court or Voluntarily, or if the official Assignee of the Bank being an individual, or firm shall be adjudged insolvent or (being an incorporated company) shall have an order made against it or pass an effective resolution for winding up either compulsorily or subject to the supervision of the court or Voluntarily, or if the official Assignee of the Bank shall repudiate the Contract, or if the Official Assignee or the Liquidator in any such winding up fails within fifteen days after notice to him requiring him to do so, to show to the satisfaction of the Contractor that he is able to carry out and fulfill the Contract and to make all payments due, and to become due hereunder and if required by the Contractor, to give security for the same, or if the works be stopped for three months under an order of the Architect/Consultant or the Bank or by any injunction or other orders of any court of law, then and in any of the said cases the Contractor shall be at liberty to determine the Contract by notice in writing to the Bank, through the Architect/Consultant, and he shall be entitled to recover from the Bank payment for all works executed and for any loss he may sustain upon any plant or material supplied or purchased or prepared for the purpose of the Contract.

7.6.2. In arriving at the amount of such payment, the net rates contained in the Contractor's original tender shall be followed, or where the same may not apply, valuation shall be made in accordance with "Prices for Extras, etc. Ascertainment thereof".

7.7. FORECLOSURE OF CONTRACT IN FULL OR IN PART:

- 7.7.1. If at any time after acceptance of the tender the Bank/Architect/Consultant shall decide to abandon or reduce the scope of the works for any reasons whatsoever and hence not require the whole or any part of the works to be carried out he shall inform the Contractor in writing to that effect and the Contractor shall have no claim to any payment or compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.
- 7.7.2. The Contractor shall be paid at the Contract rates full amount for woks executed at site, and in addition, raceable amount as Certified by the **Architect/Consultant** for the value of such material (which material shall thereupon become the property of the Bank) and also such further allowances as the **Architect/Consultant** may think fair in respect of (a) any expenditure incurred by the Contractor towards preliminary works etc. and (b) proper engagement of the Contractor may have entered into for carrying out the work.

7.8. COMPLIANCE TO BANK'S/LEGAL NORMS

7.8.1. **NOTICES**

a) The Contractor shall give all notices and pay all fees and shall comply with all Acts and Regulations for the successful completion of the Contract works.

7.8.2. AUTHORITIES, NOTICES, PATENTS, RIGHTS & ROYALTIES:

The Contractor shall conform to the provisions of all the statutes relating to the works, and to the Regulations and bye laws of any local Authority, and of any Water, Lighting, Electric supply, and of other Companies or Authorities with whose systems the structure is proposed to be connected, and shall before making any variation from the drawings or specifications that may be necessitated by so confirming, give to the

Architect/Consultant written notice, specifying the variations proposed to be made and the reason for making it, and apply for instruction thereon. In case the Contractor shall not within 120 days receive such instructions, he shall proceed with the work conforming to the provision or Regulations or Byelaws in guestion.

- a) The Contractor shall bring to the attention of the Architect/Consultant all notices required by the said Acts, Regulations or Bye-laws to be given to any Authority by the Bank or the Architect/Consultant and pay to such Authority, or to any public Officer, all fees that may be properly chargeable in respect of the works, and lodge the receipts with the Architect/Consultant.
- b) The Contractor shall indemnify the Bank against all claims in respect of patent rights, design, trademarks of name or other protected rights in respect of any constructional site, machine work or material used for or in connection with the works or temporary works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. The Contractor shall defend all actions arising from such claims, unless he has informed the Architect/Consultant before any such infringement and received their permission to proceed, and shall himself pay all royalties, license fees, damages, costs and charges of all and every sort that may be legally incurred in respect thereof. All statutory fees, deposits etc paid by the contractor for permanent works to be handed over to Bank which shall be reimbursed to him by the Bank against documentary proof.
- c) The Contractor shall assist and co-ordinate with the Architect/Consultant in obtaining all statutory approvals and/or amendments to such approvals as per the rules in force from Municipality and other local bodies. Any expenditure incurred in obtaining such approvals is deemed included in the rates quoted by the **Contractor.**

7.8.3. Notices to Local Bodies:

a) The Contractor shall comply with and give all notices required under any law, rule, regulations, or byelaw of parliament, State Legislature or Local Authority relating to works. The Contractor shall before commence the execution of work issue a certificate to the Bank/ Architect/Consultant that he has obtained all the permissions Registrations and give all the notices as are required to be obtained or given under law particularly blasting permission the Police permission etc.

7.8.4. MUNICIPAL REGULATIONS:

a) The whole of the work is to comply with the requirements and byelaws of the concerned Municipal Corporation and local bodies.

7.8.5. WAGES OF LABOR EMPLOYED BY THE CONTRACTOR:

- a) The Contractor shall pay all labor employed by him at rates fixed by him at the commencement of the Contract as per the Labor Laws. Wages as applicable for the construction work as per norms stipulated by the **Local Authority** or any other statutory body or authority of the State of Gujarat or Government of India shall be followed by the contractor. No violation of such statutory laws and rules shall be permissible. This will also include the minimum and the maximum allowable wages for various categories of labor to be employed by the contractor.
- b) All wages shall be paid in full and without any deduction whatsoever at the approved rates and for full time actually worked during the wage period. Officers of

Architect/Consultant or an Officer of the Bank as may be authorized in that behalf shall have power to exercise supervision over the labor employed by the Contractor, and for such other purpose any of these officers may inspect the wage books, muster books and other labor records of the Contractor. In the event of the report of such Officer/s showing that the proper rates of wages are not being paid, or that in any manner whatsoever the dealings between the Contractor and his

- c) Labors are not satisfactory, the Architect/Consultant/Bank shall pass such orders upon the report as he considers desirable, and those orders shall be final and binding upon the Contractor. The contractor shall indemnify and keep indemnified the Architect/Consultant and / or the Bank against any claim arising from failure of the Contractor to comply with such labor laws.
- d) The contractor shall register with Assistant Labor Commissioner (Central) as contractor approved by the Bank.

7.8.6. **DISPLAY OF NOTICES**

7.8.7. The Contractor shall display all permissions licenses registration certificates and other statements required to be displayed under various labor laws and other legislation's applicable to the works at the site office and also maintain the requisite register/records factually and up to date and keep them ready for inspection by the concerned authorities and also make available the same to the Architect/Consultant/ Bank for inspection.

7.8.8. INSURANCE POLICIES:

- a) The Contractor shall not commence any work at site, until all the insurance Policies, as required here and in terms of the General Conditions of Contract, have been submitted to the Bank. Renewal of the same if required due to extension of time for completion or similar reasons is also the responsibility of the Contractor.
- b) Notwithstanding anything to the contrary mentioned in the Contract, Contractors have to submit all Insurance Policies to the Bank directly to make the Bank satisfy them regarding adequacy of values of Insurance, validity etc. as per contractual clauses.
- c) The Contractor shall arrange for renewals of these policies on their own. Any omissions to do so or delay in non-receipt of any information will be no excuse for failure to renew them or keep them in force without a break.

7.8.9. **INDEBTEDNESS AND LIENS:**

- a) The Contractor agrees to furnish the Bank from time to time during the progress of the work as requested, verified statements showing the Contractors' total outstanding indebtedness in connection with the work covered by the Contract.
- b) Before final payment is made, the Bank may require the Contractor to furnish the Bank with satisfactory proof that there are no outstanding debts or liens in connection with the Contract. If during the progress of the work, the Contractor shall allow any indebtedness to accrue to Sub-Contractors or others and shall fail to pay or discharge same within Seven days after demand, then the Bank may withhold any money due to the Contractor until such indebtedness is paid or apply the same towards the discharge thereof.

7.8.10. INDIAN STANDARDS CODE:

a) The relevant I.S. Code of practice shall be the latest version with its amendments/revisions. The Contractor shall keep and maintain copies of the latest editions of relevant I.S. Codes at the work site and make it available to **Architect/Consultant** when required.

7.8.11. TREASURE TROVE:

a) Should any important and valuable materials/items be found while carrying out the works, the same shall be the property of the Bank. The Contractor shall give immediate notice to the **Architect/Consultant** of any such discovery and shall hand over any such treasure to the Bank on demand.

7.8.12. **TECHNICAL AUDIT**

- a) The work is liable to be technically audited by the Chief Technical Examiner of the Central Vigilance Commission Government of India from time to time. Any defects, improvements or testing etc. pointed out by the Chief Technical Examiner should be carried out by the Contractor at his own cost and any deduction suggested by the CTE will be affected.
- b) The Bank shall have a right to conduct a technical examination and audit of works and final bills of the contractor including all supporting vouchers, abstract, etc. to be made at the time of payment of the bill. If as a result of this examination or otherwise any sum is found to have been overpaid in respect of any work done by the contractor under the contract the contractor shall be liable to return the amount of over payment and it will be lawful for the Bank to recover the same from any sum or sums due to him and in any other manner legally permissible and if it is found that the Contractor was paid less than what was due to him under the contract in respect of any work, executed by him under the contract, the amount of such under payment shall be duly paid by the Bank.
- c) Any sum of money due and payable to the contractor (including security deposit returnable to him) under this contract may be appropriated by the Bank and set off against any claim of the Bank for the payment of a sum of money arising out of or under any other contract made by the Contractor with the Bank.

8. ROLE OF ARCHITECT / CONSULTANT

8.1. ROLE OF THE ARCHITECT/CONSULTANT

- 8.1.1. Architect/Consultant's duties are to design, control and supervise the works and to test any materials to be used or workmanship employed in connection with the works, quality control, project scheduling and monitoring and co-coordinating with all other agencies and Civil Contractor, checking of measurements, certification of bills, preparing extra deviation items, preparing minutes of meetings etc.
- 8.1.2. Wherever it is mandatory by law that the **Architect/Consultant** so appointed by the Bank shall be registered with the council of architecture/Competent Authority.
- 8.1.3. The Contractor shall afford the Architect/Consultant every facility and assistance for examining the works and materials and checking and measuring time and materials. The Architect/Consultant shall have no power to revoke, alter, enlarge, or relax any requirements of this Contract, or to sanction any day-work, additions, alterations,

- construction of baroda swarojgar vikas sansthan (RSETI) building at ahwa, district dang, gujarat, india deviations or omissions unless such an authority may be specially confirmed by a written order of the **Bank**.
 - 8.1.4. The Architect/Consultant shall act in consultation with the Bank regarding quality of works, interpretation of drawings, contract documents and finalize the selection of finishing materials. The Architect/Consultant shall check/ record the measurements made by Contractor's representative for all items of works and on completion hand over the records to the Bank.
 - 8.1.5. The **Architect/Consultant** shall have the power to give notice to the Contractor or his Engineer In charge about the non-approval of any work or materials and such works shall be suspended or the use of such materials should be discontinued until the decision of the **Architect/Consultant** in consultation with Bank if required is obtained. The work will from time to time be visited by the Architect/Consultant / Bank but such examination shall not in any way exonerate the Contractor from the obligation to remedy any defects which may be found to exist at any stage of the work or after the same is completed. Subject to the limitations of this clause, the Contractor shall take instructions only from the **Architect/Consultant** as the case may be. In other words the contractors shall take total responsibility for the execution of work / items of work by using quality materials and providing best of workmanship to fulfill the true intent of the tender provision.
 - 8.1.6. The **Architect/Consultant** shall have such other powers and discharge other functions as are specifically provided in this contract including such incidental or consequential powers or duties, subject always to such specific instructions or directions of the Bank, which shall be duly notified to the Contractor.

8.2. TO DEFINE TERMS AND EXPLAIN PLANS:

8.2.1. The various parts of the Contract are intended to be complementary to one another; but should any discrepancy appear, or any misunderstanding arise as to the import of anything contained therein, the explanations of the **Architect/Consultant** shall be final and binding. The correction of any errors or omissions of the Drawings and Specifications may be made by the **Architect/Consultant**, when such correction is necessary to bring out clearly the intention, which is indicated by interpretation of the drawings & Specifications as a whole.

8.3. TYPOGRAPHICAL OR CLERICAL ERRORS:

8.3.1. The **Architect/Consultant's** clarifications regarding partially omitted particulars or typographical or clerical errors shall be final and binding on the Contractor.

8.4. SITE VISITS:

8.4.1. The **Architect/Consultant/Bank** shall visit the site from time to time at their discretion, or when expressly called upon to do so, to co-ordinate various activities and/or to answer such queries that may be posed at site as on drawings.

8.5. ADDRESS FOR SERVICE

8.5.1. All letters and Notices under or pursuant to these presents shall be hand delivered against acknowledgement or sent by Registered Post with Acknowledgement Due at the respective addresses mentioned below. Any change in the addresses shall be duly intimated by the concerned Party to all others.

Address of Bank:

Bank of Baroda, Valsad Region, Regional Office, 1st Floor, Mahalaxmi Tower, Tithal Road, Valsad-396001, India.

Name & Address of Architect/Consultant:-

Shyamal Gandhi & Associates
21, VIRNAGAR SOC. OPP. I.D.B.I. BANK,
BHIMJIPURA, NEW WADAJ, AHMEDABAD-380013
(m) 9016310164 E-mail – sqassociate21@gmail.com

8.6. TAKING OVER

8.6.1. Upon the successful completion of all the tests to be conducted at site on the materials/items executed by the contractor, the **Architect/Consultant** shall issue a recommendation letter to the Bank confirming that the building is ready to be taken over by the Bank. The issuance of such a recommendation letter for taking over shall not relieve the contractor of any of his obligations under the terms and conditions of contract.

8.7. ARBITRATION

8.7.1. SETTLEMENT OF DISPUTE BY ARBITRATION

- a) If any dispute, differences or question shall at any times arise between the parties as to the construction of this Agreement or concerning anything herein contained or arising out of the Agreement or as to the rights, liabilities and duties of the parties hereunder except in respect of matters for which it is provided hereunder that the decision of the Employer is final and binding, the same shall be referred to arbitration and final decision after giving at least 30 days' notice in writing to the other (hereinafter referred to as the "Notice for Arbitration" clearly setting out the items of dispute) to a sole arbitrator who shall be appointed as hereinafter provided. For this purpose of appointing the sole arbitrator referred to above, the Employer shall send to the Architects within thirty days of the "Notice of Arbitration" a panel of three names of persons who shall be presently unconnected with the organization of the Employer or the Architects.
- b) The Architects shall, on receipt of the names as aforesaid, select any one of the persons so named to be appointed as the Sole Arbitrator and communicate his name to the Employer within 15 days of receipt of the names. The Employer shall thereupon without any delay appoint the said person as the Sole Arbitrator. If the Architects fail to communicate such selection as provided above within the period specified, the Employer shall make the selection and appoint the sole arbitrator from the panel notified to the Architects.
- c) If the Employer fails to send to the Architect the panel of three names as aforesaid within the period specified, the Architects shall send to the Employer a panel of three names of persons who shall be unconnected with either party. The Employers shall on receipt of the names as aforesaid, select any of the persons and appoint him as the Sole Arbitrator. If the Employer fails to select the person and appoint him as the Arbitrator within 30 days of the receipt of the panel and inform the Architect accordingly, the Architects shall be entitled to appoint one of the persons from the panel as Sole Arbitrator and communicate his name to the Employer.

Seal with signature of the bidder

- d) If the Arbitrator so appointed is unable or unwilling to act or refuses his appointment or vacates his office due to any reason whatsoever another Sole Arbitrator shall be appointed. The arbitration shall be governed by the Arbitration & Conciliation Ordinance 1996 as in force from time to time. The award of the Arbitrator shall be binding and final on the parties. It is hereby agreed that in all disputes referred to the Arbitration, the Arbitrators shall give a separate award in respect of each dispute or difference in accordance with the terms of reference and the award shall be reasoned award.
- e) The fees, if any of the Arbitrator shall, if required to be paid before the award is made and published, be paid in equal proportion by each of the parties. The cost of the arbitration including the fees if any, of the Arbitrator shall be borne and paid by such party or parties to the dispute in such manner or proportion as may be directed by the Arbitrator in the award. The Employer and the Architects also hereby agree that the arbitration under this clause shall be a condition precedent to any right of action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.
- f) The Arbitrator or Arbitrators or Umpire, as the case may be, will be Fellows of the Indian Institute of Architects or Fellow of Institute of Engineers (India). The award of the Arbitrator(s) or Umpires, as the case may be, shall be final and binding upon the parties to the Arbitration.

8.7.2. **LEGAL**:

a) All disputes and differences of any kind whatsoever arising out of or in connection with the Work Order whether during or after completion of contract shall be deemed to have arisen at Bank of Baroda, Regional office, Valsad Region shall have jurisdiction to determine the same.

8.7.3. WORK TO BE CONTINUED DURING THE PENDANCY OF THEARBITRATION

a) The Contractor shall continue with the construction works with due diligence and speed so as to complete the same within the period agreed upon, notwithstanding any dispute or difference or question is referred to arbitration. The works shall not be delayed on account of any such reference made to the Arbitrators.

7. SPECIAL CONDITIONS OF CONTRACT

- 1. Tenderers shall go through all documents before quoting rates and provide for necessary cost as may be included in either bill or material or specifications.
- 2. Tenderers shall be given prices in blank column Entries in English made in ink. Arrive also at the grand total must also fill in all "rates only columns" and sign all corrections.
- 3. Tender shall be invalid unless all rates are filled in. No arbitrary condition shall be submitted. Tenders shall be signed by all the legal partners of the firm.
- 4. Each page of the tender documents shall be signed by the Tenderer.
- 5. The Tenderer whose tender is accepted shall be bound to enter into the contract within eight days of intimation from BANK.
- 6. Work shall be done night and day without extra charge, if necessary.
- 7. Tenderer shall provide for stacking of materials in such a way as to facilitate rapid checking of quantities.
- 8. Materials supplied by owner shall be used only in owner's work.
- 9. Contractors shall pay any local charges relating to execution of work.
- 10. Contractor shall allow for all wastages in the rates.
- 11. Contractor shall arrange for all temporary connections.
- 12. No extras shall be paid, quantity sheets and drawings both are to be considered jointly, and Architect/Consultant is the final authority for the interpretation.
- 13. Site instruction shall be deemed for proper execution and shall be carried out without extra charge.
- 14. Order book with numbered pages shall be kept on site. The contractor shall carry out all instructions properly.
- 15. Contractors shall insure whole work against fire, PICT and third party.
- 16. Contractor have to visit the Site, cleaning and leveling of site premises and removing all debris from the site and no separate payment will be given to contractor for the same.
- 17. Contractor has to get temporary and permanent Electricity and water Supply connection at his own cost. For permanent connection of electricity and water supply contractor will get reimbursement for only deposit amount from bank authority for the same.
- 18. Contractor has to verify the Land demarcation as per final T.P. scheme and he should get necessary conformation from Authority and surveyor.
- 19. Contractor has to develop Infrastructure and Suggested amenities at site during site execution as listed below.

- Contractor has to provide well-furnished site office having area not less than 200sq ft for exclusive use of Bank Authority / Consultant / PMC.
- Contractor has to provide Necessary equipment's like, computer with required software, copier machine, scanner, printer, table, chairs in cabin.
- Temporary Provision of Toilets and Washroom to facilitate supervisor and workers.
- Contractor shall have to make his own arrangement for water required for construction, testing and drinking water for his labor/employees too.
- Contractor has to manage proper storage of all the materials and labor accommodation at his own cost.
- Contractor has to establish the testing Lab at site. This expense will be borne by contractor.
- Power required for the constructions, erection and other allied job shall be arranged by the contractor at his own cost. The Contractor shall have to make his own arrangement for getting electric power. No compensation shall be paid for the delay in getting power supply.
- Contractor has to take necessary Labor Insurance, all the necessary safety precautions at his on cost during the renovation work.
- Contractor has to provide full time qualified B.E. Electrical Engineer having experience of 4 years in execution of similar projects.
- Contractor has to provide Private Transportation services (Four-wheel car) to Architect/ Bank Authority during site execution.
- Contractor has to send daily, weekly and monthly reports with photographs to consultant and Bank Authority.
- 20. All the safety and entry rules shall be strictly followed. The contractor is fully responsible for the safety of his staff and workmen and must equip them with safety appliances and tools. Contractor have to submit labor insurance.
- 21. The work shall be executed strictly as per the time schedule/bar chart submitted along with price bid offer. The entire job/project has to be completed within a period of -6 (six) Months from the Date of placement of order including monsoon. The time limit includes the time limit required for testing, rectification, if any, retesting and completion in all respect to the entire satisfaction of the Bank/Architect/Consultant.
- 22. The contractor shall cover all his equipment and materials at site with requisite insurance against theft, larceny, dacoity, fire tempest, flood earthquake etc.
- 23. The contractor shall be responsible for the provision of safety arrangement and protective clothing for all operators on the site whether or not engaged in

- construction of baroda swarojgar vikas sansthan (RSETI) building at ahwa, district dang, gujarat, india actual operation of supervision. The contractor shall also be responsible for safety arrangements of all equipment used for construction and shall employ trained workmen conversant with safety regulation.
 - 24. The contractor shall have to take photographs during various stages of construction activity for each of the work at no extra cost. The photograph shall be of size 4" x 6" on mat paper.
 - 25. For proper Maintenance & Cleaning of premises, one In charge/supervisor must be deployed & will be responsible for attending & resolving all the complaints timely.
 - 26. All the Material to be used in the Project must be approved by Engineer In charge / Consultant before commencing the work.
 - 27. The contractor shall execute his work in phased manner as directed by the Engineer from time to time so as not to obstruct or retard the work being executed simultaneously by other agencies.
 - 28. Contractor has to provide full time qualified B.E. Civil Engineer having experience of -4-years in execution of similar projects.
 - 29. Contractor has to provide one senior supervisor for regular intimate the progress of work to Consultant & Bank Authority.
 - 30. If any changes required in drawings during site execution Architect / Authority have to all ride to modify it and contractor have to bind to follow the decision accordingly.
 - 31. Contractor has to take all risk policy & workman compensation policies before commencement of the project & should be effective up to handing over the possession. If case of any Incident i.e. fatal Accident that occurs at site, complete responsibility will be of the Contractor.
 - 32. A resident Senior Engineer is supposed to be deputed by the Contractor at site during all working hours/days & he is fully responsible for any decision, discussion, co-ordination with consultants related to work.
 - 33. Contractor has to provide Private Transportation services (Four-wheel car) to Architect/Bank Authority during site execution.
 - 34. Contractor has to send daily, weekly and monthly reports with photographs to consultant and Bank Authority.
 - 35. If the contractor fails to complete the work within the stipulated completion date for the work or he shall pay liquidated damages at 0.10% (zero point one percent) of contract value per day of delay in completion and handing over the work or part thereof as the case may to the Bank Of Baroda. The amount of liquidated damages shall, however, be subjected to a maximum of ten (10) percent of the contract value. Delays in excess of one hundred days will be a cause for termination of the contract and forfeiture of all security for performance. In case of penalty for delay, decision of Bank of Baroda / Consultant shall be considered final & binding upon the contractor.
 - 36. The quantities given in this schedule of quantities are approximate and subject to variations without vitiating the contract.

- 37. The rate for each item of work shall, unless expressly stated otherwise, include the following (but not limited to the list given below) for the completion of works in all respects as per conditions of Contract, technical specifications, drawing etc:
- 38. All requirements and expenses for completion of work as per Rules and Regulations of Local Bodies, State Government and Central Government of India.
- 39. All materials, equipment's, accessories, consumable, controls and instruments, tools, tackles, plants, scaffolding/double scaffolding labor, maintenance, fixing, cleaning, making good hauling, hoisting etc.,
- 40. Waste on material and labor
- 41. Loading, Unloading, handling/double handling, setting out protection from weather, temporary supports, platforms etc., and the maintenance, of the same, dismantling of temporary works, disposal of debris and all other labor necessary for the execution of works.
- 42. Testing the installation as often as necessary, Contractors to arrange for all special instruments and tools required for such testing.
- 43. Apportion of costs for general facilities to be used by the Contractor's staff such as lifts, electricity, telephones etc. during execution if such facilities are provided by other contractors and who arrange for such facilities in the first instance.
- 44. Fees for testing the materials, equipment or overall installation by appropriate authorities.
- 45. Supervising Civil/ Masonry / Carpentry Works done by other agencies on behalf of the Bank for Electrical contractor.
- 46. All requirements of specification and drawings. The description of work given in the schedule of quantities is a brief description and shall be read in conjunction with specifications and drawings.
- 47. The rates quoted by the Tenderer will be deemed to be for the finished work complete in all respects with accessories, fitting, mounting arrangements normally provided with such equipment and/or needed for execution, completion, safe operation of equipment as required through they may not have been specifically mentioned in technical specifications, drawings and/or schedule of equipment.
- 48. All minor Masonry, Carpentry and Civil works such as cutting opening in Masonry Walls, Internal Partitions, chasing on walls, etc. and making good the same to match existing works shall be provided by the contractor, whenever asked for by the Architect/Consultant.

SCHEDULE OF QUANTITIES:

49. All items of work contracted for shall be executed strictly in accordance with the description of the item in the Schedule of Quantities, relevant drawings and Seal with signature of the bidder

- construction of baroda swarojgar vikas sansthan (RSETI) building at ahwa, district dang, gujarat, india specifications read in conjunction with the appropriate Indian Standard specifications and conditions of the contract and established Engineering practices.
 - 50. The rate for each item of work included in the schedule of quantities shall unless expressly stated otherwise include cost of:
 - 51. All materials, fixing materials, accessories sequence of operations, appliances, tools, plant equipment, transport labor and incidentals required and completion of the work called for in the item and as per specifications and drawings completely Wastage on materials and labor
 - 52. Loading transporting, unloading, handling as necessary, hoisting to all levels, and setting, fitting and fixing the position, protecting, disposal of debris as directed and all other labor necessary and to fully complete the job in accordance with contract documents, good practice and recognized principles of trade laid down in codes of practice.
 - 53. Liabilities, obligations and risks arising out of the conditions of contract.
 - 54. All requirements of specifications, whether such requirements are mentioned in the item or not shall be provided for the specifications and drawings where available are to be read as complimentary to any part of the schedule of quantities and any work called for in one shall be taken as required for all similar items.
 - 55. In the event of conflict between Schedule of Quantities and other documents, including the specifications the most stringent among them shall apply and the interpretations of the consultants/owner shall be final and binding.
 - 56. The Contractor shall be paid for the actual quantity of work executed by him in accordance with the drawings at the accepted rates.
 - 57. This schedule shall be fully priced, and the extensions and totals duly checked. The rates for all items shall be filled in INK. The entries under the amount column shall be rounded off to the nearest Rupee.
 - 58. No alterations whatsoever is to be made either to the description of items in the Schedule of quantities or specifications unless such alterations, is clarified in writing by the consultant/owner. Any such alterations, notes or additions shall, unless clarified in writing, be disregarded when tender documents are considered. Any observation on BOQ should be made in the letter accompanying technical bid for proper consideration and on disfiguring or overwriting in the documents is permitted.
 - 59. In the event of an error occurring in the amount column of the schedule, as a result of wrong extension of unit rate and quantity, the unit rate quoted by the Tenderer shall be regarded as firm and the extensions shall be amended on the basis of rates.

- 60. All errors in totaling in the amount column and in carrying forward totals shall be corrected.
- 61. Unless otherwise stated, all measurements shall be taken in accordance with Indian standard for building of Measurements IS 1200 latest revision effective on the date of measurement for Electrical items as applicable.
- 62. Any errors in quantity of items from the contract schedule shall not vitiate this contract but shall be corrected and deemed to be a variation by the Architect/Consultant/Owner.

DRAWINGS AND DATA:

- 63. Within two weeks of placement of order/letter of intent contractor shall furnish the following data in triplicate for approval by Architect/Consultant/Owner.
- General arrangement drawing of the equipment on orders showing plan, elevations, and sectional views, mounting details.
- Bill of materials.
- Descriptive catalogues, characteristic curves, duty point efficiency factor and technical particulars of all the various equipment's offered.

SPARE PARTS AND MAINTENANCE FOR MATERIALS SUPPLIED

64. Tenderer shall offer along with the bid, duly recommended by manufacturer set of spare parts required for a period of 1 year's continuous operation. Itemized unit prices with exact quantities recommended for these spares shall be separately indicated for consideration of the Owner/Consultant.

DOCUMENTS MUTUALLY COMPLIMENTARY

65. The several documents forming the contract are to be read as mutually complementary to each other and in case of ambiguities/ discrepancies, the same shall be explained and clarified by the Consultant/Owner to the Contractor in what manner the work is expected to be carried out to meet the end requirements.

INSTRUCTIONS DURING EXECUTION:

- 66. On the advice of the Owner, the consultants may issue further drawings and written instructions, details, directions and explanations collectively referred to as "Site instruction" in regard to:
- 67. Variations for modification of the design, quality or quantity of works as addition or omission or substitution of any work therein.
- 68. Any discrepancies in the drawings or between the schedule of quantities and/or specifications and/or drawings.
- 69. Removal from the site any material brought by the contractor and substitution of any other materials therefore.

- 70. The dismissal or removal from work of any person employed thereupon.
- 71. Removal/re-examination of any works executed in case of doubt of any nature.
- 72. Opening for inspection of any work covered up without proper tests by the Architect/Consultant.
- 73. Oversight on the part of the Architect/Consultant/his assistant to disapprove any defective work or material shall not prejudice the Owner/Consultant, thereafter, to disapprove such work or materials and to order pulling down, replacement, removal breaking up or reconstruction.
- 74. The Contractor shall make his own arrangement for the engagement of all labor and shall be responsible for regulating their service conditions, work conditions in conformity with all Acts, Regulations, Rules or order of competent authority under relevant laws in force during the tendency of the contract.
- 75. Contractor shall indemnify the Owner from all claims relating to the workers/ staff/ sub-contractors, Salaries, Wages, Overtime, Leave, Provident Fund, Medical facilities, gratuity, Bonus or any other claim as applicable and stipulated in any statutory provisions, rules or order of competent authority.
- 76. All materials so far as procurable shall be of the reputed make in the category of manufacture and bear the stamp of quality of the Bureau Standards wherever applicable. The contractor shall furnish documentary proof, test certificates and guarantees as relevant to such materials from manufacturers, which shall match with the date of procurement.

ELECTRICAL INSTALLATION:

- 77. The whole of the electrical installation shall be carried out by a major registered licensed Electrical Contractor
- 78. The electrical installation shall include the supply of the whole of the materials and the work of fixing, necessary for the complete installation. The work shall be carried out in strict accordance with the latest edition of the Regulations for the Electrical Equipment of Buildings issued by the Institute of Electrical Engineers I.E. rules and to the satisfaction of and in accordance with rules, regulations, and requirements of the supply company and the Fire department all to the entire satisfaction of the Architect/Consultant & owner.
- 79. The positions of all points and equipment shown on the drawings shall be assumed to be correct for the purposes of tendering, but it is the main contractor's responsibility to check the exact positions on the site before commencing the works.
 - **NOTE:** This specification is of the general type only and must be used in conjunction with the drawing of the particular item being made. Anything shown on the drawing and not in the specification must be compiled with, and vice versa.

8. APPENDIX TO GENERAL CONDITIONS OF CONTRACT

		Construction of BSVS building at plot with
		Old Suvey No.31/1, Borkhet Ta- Ahwa
1	NAME OF THE WORK	District Dang, Gujarat.
2	ESTIMATED COST	Appx. Rs.2.57 Crores
3	TIME AND LAST DATE OF SUBMISSION OF TENDER	31/01/2025 UP TO 3.00 PM
4	PLACE & ADDRESS FOR SUBMISSION OF TENDER	Bank Of Baroda, Regional Office, Valsad Region,1 st Floor, Mahalaxmi Tower, Tithal Road,Valsad-396001,Gujarat, India.
5	CONTACT PERSON WITH TELEPHONE NO	AR. SHIVAM GANDHI PH.9016310164
6	DATE, TIME AND PLACE OF OPENING OF TENDERS	TECHNICAL BID OPENING: 31/01/2025 AT 03:30 PM AT Bank Of Baroda, Regional Office, Valsad Region,1st Floor, Mahalaxmi Tower, Tithal Road,Valsad-396001,Gujarat, India.
		BIDDERS ARE REQUESTED TO BE PRESENT FOR THE TENDER OPENING FOR WHICH NO SEPARATE INFORMATION WILL BE GIVEN. ONLY TECHNCIALLY QUALIFIED
		BIDDERS WILL BE INFORMED TO JOIN FOR OPENING OF THEIR FINANCIAL BID.
7	EARNEST MONEY DEPOSIT (EMD) IN THE FOR OF DD/BC TO BE SUMITTED ALONG WITH TECHNICAL BID ONLY	Rs.2,57,000 (RUPEES TWO LAKHS FIFTY SEVEN THOUSAND ONLY) DRAWN IN FAVOUR OF BANK OF BARODA, REGIONAL OFFICE, VALSAD.
7в	(ISD) INITIAL SECURITY DEPOSIT (PAYABLE BY L1 BIDDER AFTER AWARD OF THE WORK)	2% OF VALUE OF THE TENDER VALUE INCLUDING EMD PAID BY L-1 BIDDER.
8	RETENTION MONEY	DEDUCTIBLE IN RUNNING BILLS: 8% OF THE VALUE OF EACH INTERIM BILL AND TOTAL DEDUCTIBLE AS DETAILED IN THE TENDER DOCUMENT.
9	TERMS OF PAYMENT OF BILLS, IF ANY. SPECIFY THE MINIMUM VALUE OF WORK FOR PAYMENT OF RUNNING ACCOUNT BILLS.	INTERIM BILLS OR PERIODICAL RUNNING BILLS ON SATISFACTORY COMPLETION OF MINIMUM VALUE OF WORK OF RS 20 LAKHS. NO ADVANCE OR MOBILIZATION ADVANCE SHALL BE PAID IN ANY CIRCUMSTANCES.

	INDIA	<u> </u>
10	(PENALTY CLAUSE)LIQUIDATED DAMAGES	IN CASE OF DELAY A PENALTY @ THE RATE OF 1% OF ESTIMATED COST PER WEEK SUBJECT TO A MAXIMUM OF 10% OF ACCEPTED CONTRACT SUM BUT NOT EXCEEDING THE TOTAL SECURITY DEPOSIT. (INITIAL PLUS RETENTION) WOULD BE STRICTLY IMPOSED.
11	STIPULATED TIME FOR COMPLETION OF THE WORK/SUPPLY.	-7- MONTHS
12	VALIDITY PERIOD OF THE TENDER.	120 DAYS FROM DATE OF OPENING OF TENDER
13	TAXES	RATES QUOTED SHOULD INCLUDE ALL TAX (EXCLUDING GST) AND OTHER CHARGES LIKE TRANSPORTATION, LOADING/UNLOADING ETC. HOWEVER, I.T AND TDS WILL BE DEDUCTED AT SOURCE AS APPLICABLE.
14	INSURANCE OF THE WORK	WITHIN -7-DAYS FROM THE DATE OF ACCEPTANCE OF THE WORK
15	DATE OF COMMENCEMENT	WITHIN -15- DAYS FROM THE DATE OF WORK ORDER OR WITHIN MOBILIZATION PERIOD, WHICH EVER IS LATER
16	PERIOD FOR CERTIFICATION OF INTERIM BILLS BY THE ARCHITECT	8 WORKING DAYS FROM THE DATE OF RECEIPT OF THE BILL BY THE ARCHITECT
17	PERIOD OF CERTIFICATE OF FINAL BILL BY ARCHITECT	15 WORKING DAYS FROM THE DATE OF RECEIPT OF BILL BY THE ARCHITECT.
18	DEFECT LIABILITY PERIOD	12 MONTHS
19	LIQUIDATED DAMAGES	1% OF ESTIMATED COST/ AMOUNT FOR EACH WEEK SUBJECT TO MAXIMUM OF 10% OF THE CONTRACT VALUE
20	RELEASE OF INITIAL SECURITY DEPOSIT	AFTER SATISFACTORY COMPLETION OF THE WORK AND CERTIFICATION OF FINAL BILL
21	RELEASE OF RETENTION MONEY IN 2 PARTS	50% OF THE RETENTION AMOUNT IS REFUNDED ON ISSUE OF COMPLETION CERTIFICATE BY THE ARCHITECT, BALANCE 50% WILL BE REFUNDED 14 DAYS AFTER DEFECT LIABILITY PERIOD PROVIDED ALL DEFECTS ARE ATTENDED SATISFACTORILY IN ACCORDANCE WITH CONTRACTOR.
22	MOBILISATION PERIOD	7DAYS FROM THE DATE OF WORK ORDER

9. PREAMBLE AND SPECIFICATIONS

The quantities given in this schedule of quantities are approximate and subject to variations without vitiating the contract.

Pricing:

The rate for each item of work shall, unless expressly stated otherwise, include the following (but not limited to the list given below) for the completion of works in all respects as per conditions of Contract, technical specifications, drawing etc:

All requirements and expenses for completion of work as per Rules and Regulations of Local Bodies, State Government and Central Government of India.

All materials, equipments, accessories, consumable, controls and instruments, tools, tackles, plants, scaffolding/double scaffolding labor, maintenance, fixing, cleaning, making good hauling, hoisting etc.,

Waste on material and labor

Loading, Unloading, handling/double handling, setting out protection from weather, temporary supports, platforms etc., and the maintenance, of the same, dismantling of temporary works, disposal of debris and all other labor necessary for the execution of works.

Testing the installation as often as necessary, Contractors to arrange for all special instruments and tools required for such testing.

Painting of all equipment, pipes and supports etc., as per color codes to be decided for various systems.

Apportion of costs for general facilities to be used by the Contractor's staff such as lifts, electricity, telephones etc. during execution if such facilities are provided by other contractors and who arrange for such facilities in the first instance.

Fees for testing the materials, equipment or overall installation by appropriate authorities. Supervising Civil/ Masonry / Carpentry Works done by other agencies on behalf of the Bank for contractor.

All requirements of specification and drawings Description of work given in the schedule of quantities is a brief description and shall be read in conjunction with specifications and drawings.

The rates quoted by the Tenderer will be deemed to be for the finished work complete in all respects with accessories, fitting, mounting arrangements normally provided with such equipment and/or needed for execution, completion, safe operation of equipment as required through they may not have been specifically mentioned in technical specifications, drawings and/or schedule of equipment.

All minor Masonry, Carpentry and Civil works such as cutting opening in Masonry Walls, Internal Partitions, Chasing on walls, etc. and making good the same to match existing works shall be provided by the contractor, whenever asked for by the Architect/Consultant.

SCHEDULE OF QUANTITIES:

All items of work contracted for shall be executed strictly in accordance with the description of the item in the Schedule of Quantities, relevant drawings and specifications read in conjunction with the appropriate Indian Standard specifications and conditions of the contract and established Engineering practices.

The rate for each item of work included in the schedule of quantities shall unless expressly stated otherwise include cost of:

All materials, fixing materials, accessories sequence of operations, appliances, tools, plant equipment, transport labor and incidentals required, and completion of the work called for in the item and as per specifications and drawings completely Wastage on materials and labor

Loading transporting, unloading, handling as necessary, hoisting to all levels, and setting, fitting and fixing the position, protecting, disposal of debris as directed and all other labor necessary and to fully complete the job in accordance with contract documents, good practice and recognized principles of trade laid down in codes of practice.

Liabilities, obligations and risks arising out of conditions of contract

All requirements of specifications, whether such requirements are mentioned in the item or not shall be provided for the specifications and drawings where available are to be read as complimentary to any part of the schedule of quantities and any work called for in one shall be taken as required for all similar items.

In the event of conflict between Schedule of Quantities and other documents, including the specifications, the most stringent among them shall apply and the interpretations of the consultants/owner shall be final and binding.

The Contractor shall be paid for the actual quantity of work executed by him in accordance with the drawings at the accepted rates.

This schedule shall be fully priced, and the extensions and totals duly checked. The rates for all items shall be filled in INK. The entries under the amount column shall be rounded off to the nearest Rupee.

No alterations whatsoever is to be made either to the description of items in the Schedule of quantities or specifications unless such alterations, is clarified in writing by the consultant/owner. Any such alterations, notes or additions shall, unless clarified in writing be disregarded when tender documents are considered. Any observation on BOQ should be made in the letter accompanying technical bid for proper consideration and on disfiguring or overwriting in the documents is permitted.

In the event of an error occurring in the amount column of the schedule, as a result of wrong extension of unit rate and quantity, the unit rate quoted by the Tenderer shall be regarded as firm and the extensions shall be amended on the basis of rates.

All errors in totaling in the amount column and in carrying forward totals shall be corrected. Unless otherwise stated, all measurements shall be taken in accordance with Indian standard for building of Measurements IS 1200 latest revision effective on the date of measurement for items as applicable.

Any errors in quantity of items from the contract schedule shall not vitiate this contract but

shall be corrected and deemed to be a variation by the Architect/Consultant/Owner.

DRAWINGS AND DATA:

Within two weeks of placement of order/letter of intent contractor shall furnish the following data in triplicate for approval by Architect/Consultant/Owner.

General arrangement drawing of the equipment on orders showing plan, elevations, and sectional views, mounting details.

Bill of materials:

Descriptive catalogues, characteristic curves, duty point efficiency factor and technical particulars of all the various equipment's offered.

SPARE PARTS AND MAINTENANCE FOR MATERIALS SUPPLIED

Tenderer shall offer along with the bid, duly recommended by manufacturer set of spare parts required for a period of 1-year continuous operation. Itemized unit prices with exact quantities recommended for these spares shall be separately indicated for consideration of the Owner/Consultant.

DOCUMENTS MUTUALLY COMPLIMENTARY

The several documents forming the contract are to be read as mutually complementary to each other and in case of ambiguities/ discrepancies, the same shall be explained and clarified by the Consultant/Owner to the Contractor in what manner the work is expected to be carried out to meet the end requirements.

INSTRUCTIONS DURING EXECUTION:

On the advice of the Owner, the consultants may issue further drawings and written instructions, details, directions and explanations collectively referred to as "Site instruction" in regard to.

A variation for modification of the design, quality or quantity of works as addition or omission or substitution of any works therein.

Any discrepancies in the drawings or between the schedule of quantities and/or specifications and/or drawings.

Removal from the site any material brought by the contractor and substitution of any other materials, therefore,

The dismissal or removal from work of any person employed thereupon.

Removal/re-examination of any works executed in case of doubt of any nature.

Opening for inspection of any work covered up without proper tests by the Architect/Consultant.

Oversight on the part of the Architect/Consultant/his assistant to disapprove any defective work or material shall not prejudice the Owner/Consultant, thereafter, to disapprove such work or materials and to order pulling down, replacement, removal breaking up or reconstruction.

The Contractor shall make his own arrangement for the engagement of all labor and shall be responsible for regulating their service conditions, work conditions in conformity with all Acts, Regulations, Rules or order of competent authority under relevant laws in force during the tendency of the contract.

Contractor shall indemnify the Owner from all claims relating to the workers/ staff/ sub-contractors, Salaries, Wages, Overtime, Leave, Provident Fund, Medical facilities, gratuity, Bonus or any other claim as applicable and stipulated in any statutory provisions, rules or order of competent authority.

All materials so far as procurable shall be of the reputed make in the category of manufacture and bear the stamp of quality of the Bureau Standards wherever applicable. The contractor shall furnish documentary proof, test certificates and guarantees as relevant to such materials from manufacturers, which shall match with the date of procurement.

NOTE:

This specification is of the general type only and must be used in conjunction with the drawing of the particular item being made. Anything shown on the drawing and not in the specification must be compiled with, and vice versa.

10. GENERALTECHNICAL SPECIFICATION FOR BUILDING WORKS

NOTES:

- 1. In the specification "as directed" / "Approved" shall be taken to mean, "as directed" / Approved by the Consulting Architects/Engineers.
- 2. Wherever a reference to any Indian Standard appears in the specifications, it shall be taken to mean as a reference to the latest edition of the same in force on the date of agreement.
- In "Mode of Measurement" in the specification wherever a dispute arises in the absence of specific mention of a particular point or aspect, the provisions on these particular point or aspects in the relevant Indian Standards shall be referred to.
- 4. All measurements and computations, unless otherwise specified, shall be carried out nearest to the following limits:

(i)	Length, width and depth (height)	 0.01 Ft.
(ii)	Areas	 0.01 Sq.Ft.
(iii)	Cubic Contents	 0.01 CuFt.

In recording dimensions of work.

The sequence of length, width and height (depth) or thickness shall be followed.

- 5. The distance, which constitutes lead, shall be determined along the shortest practical route and not necessarily the route actually taken. The decision of the Consulting Architects/Engineers in this regard shall be taken as final.
- 6. Where no lead is specified, it shall mean "all leads".
- 7. Lift shall be measured from plinth level.
- 8. Definite particulars covered in the items of work, though not mentioned or elucidated in its specifications shall be deemed to be included therein.
- 9. Reference to specifications of materials as made in the detailed specification the items of works is in the form of a designation containing the number of the specification of the material and prefix 'M' e.g. 'M-1'.
- 10 Approval of the samples of various materials given by the Consulting Architects/Engineers shall not absolve the contractor from the responsibility of replacing defective material brought on site or materials used in the work found defective at a later date. The contractor shall have no claim to any payment or compensation whatsoever on account of any such materials being rejected by the Consulting Architects/Engineers.
- 11 The contract rate of the item of work shall be for the work completed in all respects.
- 12 No collection of materials shall be made before it is approved from the Consulting Architects/Engineers.
- 13 Collection of approved materials shall be done at site of work in a systematic manner. Materials shall be stored in such a manner as to prevent damage, deterioration or intrusion of foreign matter and to ensure the preservation of their quality and fitness for the work.

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA

- 14 Materials, if rejected by the Consulting Architects/Engineers, shall be immediately removed from the site of work.
- No materials shall be stored prior to, during or after execution of a structure in such a way as to cause or lead to damage on overloading of the various components of the structure.
- 16 All work shall be carried out in a workmanlike manner as per the best techniques for the particular item.
- 17 All tools, templates, machinery and equipment for correct execution of the work as well as for checking lines, levels, alignment of the works during execution shall be kept in sufficient numbers and in good working condition on the site of the work.
- 18 The mode procedure and manner of execution shall be such that it does not cause damage or overloading of the various components of the structure during execution after completion of the structure.
- 19 Special modes of construction not adopted in general Engineering practice, if proposed to be adopted by the contractor, shall be considered only if the contractor provides satisfactory evidence that such special mode of construction is safe, sound and helps in strength and quality. Acceptance of the same by the Consulting Architects/Engineers shall not, however, absolve the contractor of the responsibility of any adverse effects and consequences of adopting the same in the course of execution of completion of the work.
- 20 All installations pertaining to water supply and fixtures thereof as well as drainage lines and sanitary fittings shall be deemed to be completed only after giving satisfactory tests by the contractor.
- 21 The contractor shall be responsible for observing the rules and regulations imposed under the "Minor Minerals Act" and such other laws and rules prescribed by Government from time to time.
- 22 All necessary safety measures and precautions (including those laid down in the various relevant Indian Standards) shall be taken as also of the work itself.
- 23 The testing charges of all materials shall be borne by the Contractor.
- 24 Approval to any or the executed items for the work dose not in any way relieve the contractor of his responsibility for the correctness, soundness and strength of the structure as per the drawings and specifications.

SIGNATURE	AND SEAL OF THE CONTRACTOR
Date:	

11. GENERAL DETAILED SPECIFICATION FOR WORK

SPECIFICATIONS GENERAL

These specifications are for work to be done, items to be supplied and materials to be used in the works as shown and defined on the drawings and described herein all under supervision and to the entire satisfaction of the Architect/Consultant & owner.

The workmanship is to be the best available and of a very high standard, use must be made of specialist tradesmen in all types of work and necessary allowance must be made for the same in the rates quoted.

The materials and items to be provided by the contractor shall be the best of their respective kinds as specified in the tender and in accordance with the samples approved, where materials or products are specified in these specifications and/or Bill of Quantities by the name of the manufacturer of the brand name, trade name or catalogue reference, the contractor will require to obtain prior approval of the Architect/Consultant and owner for using substitute material or product. The contractor shall produce all invoices, vouchers or receipted accounts for any materials if called upon to do so by the Architect/Consultant and owner.

Samples of all materials are to be submitted to the Architect/Consultant/owner for his approval before the contractor orders or delivers in bulk in the site. Samples together with their packing are to be provided by the Contractor free of charge and approved samples will be retained by the owner and designer for comparison with the materials which will be delivered to the site.

Should any materials be rejected by the Architect/Consultant/owner, they will be removed from the site at the Contractor's expense. Also, the contractor will be required to submit specimen finishes of colors, fabrics, etc. for approval of Architect/Consultants/ owner before proceeding with the works. Should it be necessary to prepare shop drawings, and then four copies of such drawings shall be submitted for approval of the Architect/Consultant who will retain two copies, all at the Contractor's expenses.

ITEM NO.1: EXCAVATION

Excavation for Foundation up to 1.5 M depth (GF, units) OR 2.5 M depth including sorting out and stacking of useful materials and depositing of the excavated stuff up to 50 mt. lead from the site

1. EXTENT AND INTENT

The work under this section covers all operations listed below concerning the civil work and the site development work.

- a. Clearing and grubbing
- b. Grading
- c. Excavation including removal of top soil
- d. Filling and back filling
- e. Removal and disposal of surplus material
- f. Bringing sweet earth from outside where required
- g. Hard stone soling to floors and paving

The Construction Manager / Developer shall provide all materials, labor, equipment, operations and incidental necessary and required for the completion of all aspects of work listed above as called for in the drawings and specifications.

2. GENERAL

The Developer shall visit the site and decide for himself the nature of the ground and the subsoil to be excavated. No claim of extras will be entertained as a consequence of any misunderstanding or incorrect information or ignorance of existing conditions.

3. ANTIQUITIES

Any ancient carvings, relics, coins or other curiosities discovered during the excavation or other work shall remain the property of the Owner and shall be handed over to the OOW.

4. EXCAVATED MATERIALS

Any sand, gravel of similar useful materials obtained from excavation site shall be the property of the Owner and shall not be disposed of or used in the construction of the works without prior written consent of the OOW. It is the intention of this contract that all benefits accruing from materials within the site shall pass to the Owner and the fair market rice of any such material disposed of or used shall be alleged to the Owner by the Developer and the contract sum adjusted accordingly. Borrow pits shall not be dug on the site without the prior written consent of the OOW.

5. CLEARING

The Developer shall clear the site of all rubbish and unwanted civil work. All disused foundation drains of other obstructions met with during excavation shall be dug out and cleared at the Developer's own expense.

6. BENCHMARKS

The construction Manager / Developer shall erect sufficient permanent benchmarks in suitable locations for all the works before starting work, from which all the important levels shall be laid out. a qualified surveyor shall be engaged by the Developer to locate all buildings, paths, roads, utility lines, etc. Developer shall provide all pegs, flags, pillars and labor required for setting out.

7. EXCAVATION

Excavation for foundations, footings, trenches, paving, walkways, etc., as called for on the drawings shall be generally made to net widths required by the drawings. "Battering" or "Benching" to the sides of excavation shall have prior approval of the OOW of Structural Designer. Extra excavations (i.e. excavations beyond the limits required by the drawings), "battering" and "benching" carried out without the prior approval of the OOW will not be measured, and such unauthorized excavations shall be filled up to the proper level with concrete of the same type and mix as for foundations or as ordered by the Architect or Structural Designer at Developer's own expense.

8. EXCAVATION IN ROCK

All rock excavation shall be carried out with the help of crowbars, chiseling of burning. Blasting shall not be carried out without the written permission of the OOW, roughly level or shelf bottom, as required and avoid shattering or removing rock beyond authorized lines and grades.

9. STACKING OF SOIL

Excavated materials shall be placed at a distance of more than 1.5 meters from the edge of the trench, of half the depth of the trench, whichever is more.

10. WATER IN EXCAVATION

All water, which may accumulate in excavation from all causes, is to be bailed, pumped out or otherwise removed. Adequate pumping or other facilities shall be employed to keep all excavation clear of water constantly. Care shall be taken to see that the water is not discharged where it will cause damage to the work or other property or cause inconvenience in the legitimate use of the property. During excavation, the Construction Manager / Developer shall take particular care to avoid damage to drains, water mains, underground work and services. Should any damage be done, the OOW and Structural Designer are to be notified immediately, and the damage made good at the Developers expense. Pipes, cables, etc. met with during the excavation are to be properly slung or otherwise supported.

11. NOTIFICATION TO ARCHITECT & STRUCTURAL DESIGNER

The Construction Manager / Developer shall notify the Architect and the Structural Designer when excavation is ready for inspection and no foundation shall be put in before they have approved the excavation. He should give the Architect and the Structural Designer at least three working days' notice.

12. PROTECTION

The Construction Manager / Developer shall protect the excavation from the effect of harmful weather or other damage or make good such damages to the satisfaction of the Architect and Structural Designer.

13. DRESSING

Pit and trench bottoms shall be smoothed and tightly rammed to a uniform surface.

14. FILL MATERIAL

Fill materials required for fill and back fill shall be subject to the approval of the OOW and Structural Designer. Fill materials shall be hard and free from all soft or spongy material. Clods or rocks over 20 cm in greatest dimension shall not be placed within 30 cm of grade. No material over 8 cm in size shall be placed in the upper 15 cm of fill. Fill under floors, terraces and concrete beds shall be free of saltpeter, white ants etc.

15. FILL COMPACTION

The fill shall be spread in layers not exceeding 15 cm thick and each layer shall be watered and thoroughly consolidated with a ten (10) ton roller. At locations where rolling is not possible, the filling shall be carried out in layers not exceeding 15 cm thick and each layer rammed with heavy hammers till the required level is reached. The fill shall then be flooded with water for at least 24 hours, allowed to dry and then rammed and consolidated again. The finished surfaces shall be formed to correct lines, levels, slopes, shapes etc. as required. Fills at building structures, walk paths etc. shall not be executed until all foundations, footings etc. have been inspected and approved by the Architect &Structural Designer. Return and fill in around foundations, walls etc. as described above and bring grades up to either original round levels or as required by the drawings when different from original grades.

16. FINISH GRADING

Finish grading shall be done with fertile topsoil over those area notes as 'planting' on the

plans. Depths of topsoil shall be 15 cm minimum. The Architect and the Structural designer shall approve the topsoil before placement.

17. REMOVAL

Removal of excavated materials includes the separation of the useful from the useless portion (what is useful and what is useless is left to the sole discretion of the Architect/Bank) and depositing the former in regular heaps and removal of the latter. Surplus earth, if any and useless spoil shall be carted away from the site and disposed as directed at Developer's cost. Disposal shall be at authorized dumping grounds only.

18. PLANKING, STRUTTING AND SHORING

The Construction Manager / Developer shall be responsible to adopt such measures as may be needed to uphold the sides of excavation and protect excavation against the sides of public utilities and services and other structures. The rates for excavation shall include use and waste of timber or steelwork, as planking and strutting including walls, struts and open or close poling boards as directed by the Architect/Bank.

19. HARD-CORE

Hard-core (stone soling) under floors and other locations where called for, shall be approved hard broken stones 50 mm and down. The stones shall be hand packed in position, interstices between stones packed with smaller chips and the surface thoroughly, rolled with a 10-ton roller, with frequent watering. The surface shall then be blinded with murrum, watered thoroughly and consolidated with a 10-ton roller to required grade and profiles. Earth shall on no account to be used for making god or blinding purposes. Where rolling as described above is not possible, the consolidation shall be carried out using heavy hand rammers and light manually operated rollers. The consolidated thickness shall be as shown in the drawings.

ITEM NO. 2 P.C.C.

Providing & Laying P.C.C. using Hand broken stone aggregate40mm nominal size) and curing complete excluding cost of formwork in: (A) Foundation& Plinth.

Materials: Water shall conform to M-1, cement shall conform to M-3, and sand shall conform to M-6, and Stone aggregate 40 mm nominal size shall conform to M-12.

Workmanship:

General: Before starting concrete bed of foundation trenches shall be cleared of all loose materials, leveled, watered and rammed as directed.

Proportion of Mix: The proportion of cement, sand and coarse aggregate shall be 1 part of cement, 4 parts of sand, 8 parts of stone aggregates and shall so be measured by volume

Mixing: The concrete shall be mixed in a mechanical mixer at the site of work. Hand mixing may however be allowed for a smaller quantity of work if approved by the Engineer in charge. When hand mixing is permitted by the Engineer in charge in case of breakdown of machineries and in the interest of the work, it shall be carried out on a watertight platform and care shall be taken to ensure that mixing is continued until the mass is uniform in color and consistency. However, in such cases 10% more cement than otherwise required shall have to be used without any extra cost. The mixing in mechanical mixer shall be done for a period of 1 to 2 minutes. The quantity of water shall be sufficient to produce a dense concrete of required workability for the purpose.

Transporting and placing the concrete:

The concrete shall be handled from place to mixing to final position not more than 15 minutes by the method as directed and shall be placed into its final position, compacted and finished within 30 minutes of mixing with water i.e. before the setting commences.

The concrete shall be laid in layers of 15 cms to 20 cms.

Compacting: The concrete shall be rammed with heavy iron rammers and rapidly to get the required compaction and to allow all the interstices to be filled with mortar.

Curing: After the final set, the concrete shall be kept continuously wet, if required by ponding fora period of not less than 7 days from the date of placement.

The concrete shall be measured for its length, breadth and depth, limiting dimensions to those specified on plans or as directed.

The rate shall be for a unit of one cubic feet.

ITEM NO. 3:- RE FILLING

Filling in plinth with excavated earth in trenches, plinth sides of foundation etc. in layers not exceeding 20cm thickness each deposited layer by ramming and watering.

Materials: Murrum shall be clean, of good binding quality and of approved quality obtained from approved pots/quarries of disintegrated rocks which contain silicon's materials and natural mixture of clay of calcarions origin. The size of murrum shall not be more than 20mm.conform to M.6.

Workmanship: The relevant specifications shall be followed except that the murrum or selected soil shall be filled in foundation and plinth in 20cms layers including consolidating, ramming, watering, dressing etc. complete.

Workmanship:

- > The earth to be used for filling shall be free from salts, organic or other foreign matter. All clods of earth shall be broken.
- As soon as the work in foundation has been completed and measured, the site of foundation shall be cleared of all debris, brickbats, mortar dropping etc., and filled with earth in layers not exceeding 20 cms. Each layer shall be adequately watered, rammed and consolidated before succeeding layer is laid. The earth shall be rammed with iron rammers where feasible and with the butt ends of crow-bars, where rammer cannot be used.
- ➤ The plinth shall be similarly filled with earth in layers not exceeding 20 cms. Adequately watered and consolidated by ramming with iron or wooden rammers. When refilling reaches finished level, the surface shall be flooded with water for at least 24 hours and allowed to dry and then rammed and consolidated.
- > The finished level or filling shall be kept to shape intended to be given to floor.
- ➤ In case of large heavy-duty flooring like factory flooring, the consolidation may be done by power rollers, where so specified. The extent of consolidation required shall also be as specified.
- The excavated stuff of the selected type shall be allowed to be used in filling the trenches and plinth. Under no circumstances has black cotton soil be used for filling the plinth.

Mode of measurement and payment:

The payment shall be made for filling plinths and trenches. No deduction shall be made for shrinkage or voids, if consolidated as instructed above. The rate includes the cost of collecting & carting excavated or selected earth of approved quality with all lead and labor for filling the same

in plinth under floors. The rate shall be for a unit of one cubic feet.

ITEM NO. 4:-YELLOW SOILOR SELECTED SOIL FILLING

Filling in Foundation and Plinth with Yellow Soil or selected soil in layers of 20 cm thickness including watering, ramming and consolidating etc. complete

EARTH FILLING (BY EXCAVATED EARTH)

The work shall be taken up after the building has reached up to the plinth stage or the floor level, as the case may be. The space between the walls shall be filled in with the approved earth(excavated earth) in layers of 150mm to 200mm (6" to 8") thick to required level, each layer watered and consolidated properly before putting next layer. No lumps, clods or rubbish are to be used in filling. After filling, the area to be flooded with water for a day to enable the filling to be thoroughly consolidated and allowed to get sufficiently dry after which ramming and leveling as directed by Engineer shall be done. Filling in basement over raft foundation will also come under this item.

EARTH FILLING (EARTH BROUGHT FROM OUTSIDE)

If the earth has to be bought from outside of the site, the rate includes the purchase cost of the earth, loading and unloading, its carting from outside to site, octroi, levy royalty or any other form of taxes as per prevailing rules, GST, screening if necessary, spreading in plinth area and plot area for leveling for site development and watering, ramming and consolidating with 10 ton roller, if it not possible then through electric compactors of adequate capacity. Each layer prior to putting next layers as per the instruction of Engineer. The earth shall be provided prior to bring on site. The earth shall befree from tree's roots, weeds, big stones, and other objectionable materials liable to decay.

CINDER FILLING

The work shall be carried out after the building is constructed up to plinth or the floor levels or at terrace or toilet sunk slab level as the case may be and the space required is filled up with cinder brought from outside to the required level and then it is properly watered and consolidated in the layers of 150 mm (6") wood ash, dirt and foreign matters. Cinder should be ground fine and screened through sieve of 9 meshes per Sq.Cm. (64 meshes per sq. in) and residue in the sieve should be rejected. Cinder shall not contain more than 10% if un-burnt carbon (combustible matter).

ITEM NO. 5:-R.C.C. WORKS

Providing and laying controlled cement concrete (Design Mix) using cement, fine aggregate & coarse aggregate and curing complete excluding the cost of form work and reinforcement.

Materials and workmanship:

Materials: Water shall confirm to M-1, Cement shall confirm to M-3, Sand shall confirm to M-6 Grit shall confirm to M-8, coarse aggregate shall confirm to M-12B.

General:

The relevant specification of above item of ordinary concrete shall be followed except that the concrete mix shall be designed from the preliminary tests, the proportioning of cement and aggregates shall be taken in the production to ensure that the required work cube strength is attained and maintained. The concrete shall be in grades of M-200 with prefix controlled added to it. The letter "M" refers to mix and numbers specify 28 days works cube compressive

strength of 150 mm. cubes of the mix expressed in Kg./Cu.Mt.

The proportion of cement, sand and coarse aggregates shall be determined by weight. The weight batch machine shall be used for maintaining proper control over the proportion of aggregates as per mix design.

The strength requirements of different grades of concrete shall be as under

Grade of Concrete	Compressive strength of 15 cms cubes. 28days conducted in accordance Preliminary test work test Min	with Is 516-1959 Min.
M-200	260	200
M-250	320	250

In all cases, the 28 days compressive strength specified in above table above is the criteria for acceptance or rejection of the concrete.

Where the strength of a concrete mix as indicated by test, lies in between the strength of any two grades specified in the above table, such concrete shall be classified in for all purposes as concrete belonging to the lower of the two grades between which its strength lies.

Workmanship:

The proportions for ingredients chosen shall be such that concrete has adequate workability for condition prevailing on the work in question and can be properly compacted with means available except where it can be shown to the satisfaction of the engineer in charge, that the supply of the properly graded aggregate of uniform quality can be maintained till the completion of work. Grading of aggregate shall be controlled by obtaining the coarse aggregates, indifferent sizes and being in them in the right proportions as required. Aggregates of different sizes shall be stocked in separate stockpiles. The required quantity of material shall be stockpiled for several hours, preferably a day before use. The grading of course and fine aggregate shall be checked as frequently as possible, the frequency for given job being determined by the Engineer in charge to ensure that the suppliers are maintaining the uniform grading approved for samples used in the preliminary tests.

In proportioning concrete, the quantity of both cement and aggregate shall be determined accepting the maker's weight per bag and not number of bags; it shall be weighted separately to check the net weight. Where cement is weighted from bulk stocks at site and not by bags, it shall be weighted separately from the aggregates. Water shall either be measured by volume in calibrated tanks or weighted. All measuring equipment's shall be maintained in clean and serviceable condition. Their accuracy shall be periodically checked.

It is most important to keep the specified water cement ratio constant and at its correct value. To this end, moisture content in both fine and coarse aggregates shall be determined by the Engineer in charge, according to the weather conditions. The amount of mixing water shall then be adjusted to compensate for variations in the moisture content. For the determination of moisture content in the aggregates, IS> 2380. (Part-III) shall be referred to. Suitable adjustment shall also be made in the weights of aggregates due to variation in their moisture content. The minimum quantity of cement to be used in concrete shall not be less than 220kg/M3 in plain concrete and not less than 250kg/M3 in reinforced concrete.

Mode of measurement and payment

The relevant specifications of above Item shall be followed except that item includes the cost of form work and centering work for exposed work.

The rate shall be for a unit of one cubic feet.

ITEM NO.6:-FORM WORK

Providing form work of ordinary timber planking so as to give a rough finishing including centering shuttering, strutting and propping etc. height of propping and centering below supporting floor to ceiling not exceeding 4 m. and removal of the same for in site Reinforced concrete and plain concrete work in:

Materials:

The shuttering to be provided shall be of ordinary timber planks and shall confirm to M-26. The dimensions of scantlings and battens shall conform to the design. The strength of the wood shall not be less than that assumed in the design.

Workmanship:

The form wok shall conform to the shape lines and dimension as shown on the plans and be so constructed as to remain sufficiently rigid during the placing the compacting of the concrete. The Contractor shall make adequate arrangements to safeguard against any settlement of the formwork of shuttering; centering, scaffolding, bracing etc. shall be as per design. Cleaning & Treatment of forms: All rubbish, particularly chippings shaving and saw dust shall be removed from the interior of the form before the concrete is placed and the form work in contact with concrete shall be cleaned and thoroughly wetted or treated. The surface shall be coated with soap solution applied before concreting is done. Soap solution for the purpose shall be prepared by dissolving yellow soap in water to get consistency of paint. Alternatively a coat of raw linseed oil or form of approved manufacture may be applied in case steel shuttering is used. Soap solution or raw linseed oil shall be applied after thoroughly cleaning the surface. Care shall be taken that the coating does not get on construction joint surface and reinforcement.

Stripping time: 2.3.1 in normal circumstance and where ordinary cement used forms may best ruck after expiry of following periods:

- a) Sides of walls columns and verticals faces of beam 24 to 48 hours.
- b) Beam soffits (Props left under) 7 days.
- c) Removal of props slabs (i) Slabs spanning up to 4.5 m 7 days (ii) Spanning over 4.5 m 14 days.
- d) Removal of props beams and Arches (i) Spanning up to 6 m 14 days (ii) Spanning over 6 m 21 days.

Procedure when removing the formwork: 2.4.1 all form work shall be removed without such shock or vibrations as would damage the reinforced concrete surface. Before the soffits form work and struts are removed, the soffits and the concrete surface shall be exposed where necessary in order to ascertain that the concrete has sufficiently hardened.

Centering:

The Centering to be provided shall be got approved. It shall be sufficiently strong to ensure absolute safety of the formwork and concrete work before, during and after pouring concrete Watch should be kept to see that behavior of centering and formwork is satisfactory during concreting. Erection should also be such that it would allow removal of forms in proper sequence without damaging either the concrete or the forms to be removed. The props of centering shall be provided on firm foundation or base of sufficient strength to carry the loads without any settlement. The centering and formwork shall be inspected and approved by the Engineer in charge before concreting. But this will not relieve the contractor of his responsibility for strength, adequacy and safety of formwork and centering. If there is a failure of formwork or centering, the contractor shall be responsible for the damages to the work, injury to life and damage to property.

Scaffolding:

All scaffolding, hoisting arrangements and ladders etc. required for the facilitating of concreting shall be provided and removed on completion work by contractor at his own expenses. The scaffolding, hoisting arrangements and ladders etc. shall be strong enough to withstand all live, dead and impact loads expected to act and shall be subject to the approval of the Engineer in charge. However, contractor shall be solely responsible for the safety of the scaffolding, hoisting arrangement, ladders, work and workman etc.

The scaffolding, hoisting arrangement and ladders shall allow an easy approach to the work spot and afford easy inspection.

The rate is applicable to all conditions of working and height upon to 4 mts. The rate shall include the cost of materials and labor for various operations involved such as:

- a) Splayed edges, notching, allowance for overlaps and passing at angles, battens centering, shuttering, shuttering, strutting, propping bolting, nailing wedging, easing, striking and removal.
- b) Filtering to form stop chamfered edges or splayed external angles not exceeding 20 mm width to beams, columns and the like.
- c) Temporary opening in the forms for pouring concrete, if required, removing rubbish etc.
- d) Dressing with oil to prevent adhesion of concrete with shuttering, and
- e) Raking or circular cutting.

Reuse: Before re-use all forms shall be inspected by the Engineer in charge and their suitability ascertained. The forms shall be scarred, cleaned, and joints gone over, repaired where required. Inside surface shall be retreated to prevent adhesion of concrete.

Mode of measurement and payment:

Formwork shall be measured as the area in square meters of shuttering in contract with concrete except in the case of inclined member and portion of curved profile and upper side in which case only area of underside shall be measured for section of because. Form work to secondary beams shall be measured up to the sides of main beams but no deduction shall be made from the form work of the main beam at the inter section point. No deduction shall be made from the form work of a column at inter section of beams, the rate is for completed item. The rate shall be for a unit of one Sq. Ft.

ITEM NO. 7:-BRICK WORK

Brick work using common burnt clay building bricks having crushing strength not less than 35kg./sq.cm in Superstructure in cement mortar 1:5 (1 cement: 5 fine sand) with (B) Conventional Bricks.

Materials: Water shall conform to M-1, Cement shall conform to M-3 Sand shall conform to M-6, Brick shall conform to M-15; Cement mortar shall conform to M-11.

Workmanship:

Proportion:

The proportion of the cement mortar shall be 1:6 (1 cement: 6 fine sand) by volume. Wetting of bricks. The brick required for masonry shall be thoroughly wetted with clean for about two hours before use or as directed. The cessation of bubbles, when the bricks are wetted with water is an indication of the through wetting of bricks.

Laving:

Bricks shall be laid in English bond unless directed otherwise. Half or cut bricks shall not be

used except when necessary to complete to bond; closers in such case shall be cut to required size and used near to ends of walls.

A layer of mortar shall be spread on full width for suitable length of the lower course. Each brick shall first be properly bedded and set home by gently tapping with the handle of trowel or wooden mallet. It side face shall be flushed with mortar before the next brick is laid and pressed against it. On completion of course, the vertical joints shall be fully filled from the top with mortar.

The walls shall be taken up truly in plumb. All courses shall be laid truly horizontal, and all vertical joints shall be truly vertical. Vertical joints in alternate courses shall generally directly one over the other. The thickness of brick course shall be kept uniform.

The brick shall be laid with frog upwards. A set of tools comprising of wooden straightedges, mason's sprit level, square half meter rub and pins, string and plumb shall be kept on the site of work for frequent checking during the progress of work.

Both the faces of walls of thickness greater than 23 cms shall be kept in proper place. All the connected brick work shall be kept not more than one meter above the rest of the work. Where this is not possible, the work shall be raked back according to bond (and not left toothed) at an angle not steeper than 45 degrees.

All fixtures, pipes, outlets of water, hold fasts, doors and windows etc. which are required to be built on a wall shall be embedded in cement mortar.

Joints:

Bricks shall be so laid that all joints are quite flush with mortar, Thickness of joints shall be not exceeding 12 mm. The face joints shall be raked out as directed by taking tools, daily during the progress of work, when the mortar is still green so as to provide key for plastering or pointing to done.

The face of brick shall be cleaned the very day on which the brick work is laid and all mortar dropping removed.

Curing:

Green work shall be protected from rain suitably. Masonry work shall be kept moist on all the faces for a period of seven days. The top of masonry work shall be kept well wet at the close of the day.

Preparation of foundations:

If the foundation is to be laid directly on the excavated bed, the bed shall be leveled, cleared of all loose materials, cleaned and wetted before starting masonry. If

Masonry is to be laid on concrete footing; the top of concrete shall be cleaned and moistened. The contractor shall obtain the engineer's approval for the foundation bed, before foundation masonry is started. When pucca flooring is to be provided flush with the top to plinth, the in side plinth offset shall be kept lower than the outside plinth top by the thickness of the flooring.

Mode of measurements and payment:

The measurement of this item shall be taken for the brick masonry fully completed in Foundation up to plinth. The limiting dimensions not exceeding those shown on the plans or as directed shall be final. Battered, tapered and curved portions shall be measured net.

No deduction shall be made from the quantity of brick work, nor did any extra payment make for embedding in masonry or making holes in respect of following items:

Ends of joints, beams, posts, girders rafters, purlins, trusses corbel steps etc. where cross sectional area does not exceed 500 sq. cm.

Openings not exceeding 1000 sq. cum.

- ➤ Wall plates and bed plates, bearing of slabs, chhajjas and the like whose thickness does not exceed 10 cms. and the bearing does not extend to the full thickness of wall.
- Drainage holes, and recesses for cement concrete blocks to embed hold fasts for doors, windows etc.
- ➤ Iron fixtures, pipes, upto 300 mm dia, hold fasts and doors and windows built in to masonry and pipes etc., for concealed wiring. Forming chases of section not exceeding 350 sq. cm, in masonry.

Apertures for fireplaces shall not be deducted nor shall extra labor required to make Splaying of jambs, throating and making Arches over the aperture be paid for separate. The rate shall be for a unit of one cubic feet.

ITEM NO. 8:-REINFORCEMENT

Providing TMT FE-500 bars for cement for R.C.C. work including bending and placing in position complete up to floor two level

TMT guarantees better strength compared to cold twisted deformed steel bars (IS: 1786 /85 specification) for concrete reinforcement. In addition, carbon, Sulphur and phosphorus have been restricted to values lower than those stipulated in IS -1786/85.

Bend properties:

The bars possess excellent bend ability due to the unique feature of uniform elongation. They can stand bending and re bending better than conventional CTD bars. Bend deduction may be carried out during billing.

Weldability:

The bars have very good Weldability. They do not suffer from loss of strength at the welding joints. The bars can also be easily welded with cold twisted bars. No pre-heating or post heating is necessary during welding.

Fatigue resistance:

The unique feature of these bars is their high fatigue resistance on dynamic loading on account of the high strength of the surface layer.

Fire resistance:

The thermally hardened reinforcing steel bars are more suitable for use in places prone to fire hazards, because of the high thermal stability of the heat-treated structure of the bars and the total absence of a cold-worked structural zone.

Bond strength:

Bond strength conforms to that stipulated in IS-1786/85 specification.

Application:

These bars can be used for general concrete reinforcement in buildings, bridges and various other concrete structures. They are highly recommended for use in high rise buildings because of the saving of steel through higher strength.

Mode of measurement:

Contractor has to submit barb ending schedule with photographs and calculation of weight of each element like footing, column, beam, slab etc. Consultants need details with your RA bill and final bill for certifying weight of the steel. No quantity of the steel will be measured for

chairs, spacer bars & binding wires. The rate shall be of unit Kg.

ITEM NO. 9:-15MM PLASTER

15mm thick cement plaster in single coat in brick/concrete wall for interior plastering up to floor two level and finished even and smooth in (i) C.M. 1:4

Materials: Water M-1 the cement mortar of proportion 1:3 shall conform to M-13.

Scaffolding: Wooden ballies, bamboos, planks treat les and other scaffolding shall be sound. These shall be properly examined before erection and use. Stage scaffolding shall be provided for ceiling plaster which shall be independent of the walls.

Preparation of back ground:

The surface shall be cleaned of all dust, loose mortar droppings, traces of algae, afore scence and other foreign matter by water or by brushing. Smooth surface shall be roughened by wire brushing if it is not hard. In case of concrete surface, if a chemical retarded has been applied to the form work, the surface shall be roughened by wire brushing and all the resulting dust and loose particles cleaned off and care shall be taken none of the retarders is left on the surface. Trimming of projections on brick/concrete surface where necessary shall be carried out to get an even surface.

Racking of joints in case of masonry where necessary shall be allowed to dry out for sufficient period before carrying out the plaster work.

The work shall not be soaked but only damped evenly before applying the plaster. If the surface becomes dry such area shall be moistened again. For external plaster, the plastering operation shall be started from top floor and carried own wards. For internal plastering operation may be started wherever the building frame and cladding work are ready and the temporary supporting ceiling resting on the wall of the floor have been removed. Ceiling plaster shall be completed before starting plaster to wall.

Applications of plaster:

The plaster about 15 x 15 cms shall be first applied horizontally and vertically at not more than 3meters intervals over the entire surface to serve as gauge. The surfaces of these gauges shall be truly in plane of the finished plastered surface. The mortar shall then be applied in uniform surface slightly more than the specified thickness, then brought to a true surface by working a wooden straight edge reaching across the gauges with small upward and sideways movement at time. Finally, the surface shall be finished off true with a trowel or wooden; float according as smooth or a sandy granular texture is required. Excessive toweling or overworking the float shall be avoided. All corners, arises, angles and junctions be truly vertical or horizontal and shall be carefully finished. Rounding or chamfering corners, arises junctions etc. shall be carried out with proper templates to the size required.

Cement plaster shall be used within half an hour after addition of water. Any mortar or plaster which is partially set shall be rejected and removed forthwith from the site In suspending the work at the end of the day, the plaster shall be set out clean to be line both horizontally and vertically. When recommending the plaster, the edges of the old work shall be scraped clean and wetted with cement putty before plaster is applied to the adjacent areas to enable the two to properly joint together. Plastering work shall be closed at the end of the day on the body of the wall and nearer than 15 cm. to any corners or arises. Horizontal joints in plasterwork shall not also occur on parapet tops and copings as these invariably lead to leakage. No portion of the surface shall be left out initially to be packed up later on.

Each coat shall be kept damp continuously till the next coat is applied or for a minimum period

of 7 days. Moistening shall commence as soon as plaster is hardened sufficiently. Soaking of walls shall be avoided and only as much water as can be readily absorbed shall be used excessive evaporation on the sunny or windward side of building in hot air or dry weather shall be prevented by handing matting or gunny bags on the outside of the plaster and keeping them wet.

Mode of measurements &payment:

- a. The rate shall include the cost of all materials, labor and scaffolding etc. involved in the operation described under workmanship.
- b. All plastering shall be measured in square meters otherwise specified. Length, breadth or height shall be measured correctly to centimeter.
- c. The thickness of the plaster shall be exclusive of the thickness of the key i.e. grooves or open joints in brick work stonework etc. or space between laths. The thickness of plaster shall be average thickness with minimum 10 mm at any point on this surface.
- d. This item includes plastering up to floor two level.
- e. The measurement of plastering shall be taken between the walls or partition (dimensions before plastering being taken) for length and from the top of floor or skirting to ceiling for height.
 - Depth of cover of cornices if any shall be deducted.
- f. Soffits of stairs shall be measured as plastering on ceiling. Flowing soffits shall be measured separately.
- g. For jambs, soffits, sills etc for openings not exceeding 0.5 sq.mtrs.in area for ends of joints, beams posts, girders steps, etc. not exceeding 0.5 sq. mt in area and for openings exceeding 0.5 sq. mt. And not exceeding 3.00 sq. mt in each area deduction sand additions shall be made in the following manner.
- No deductions shall be made for ends of joints, beams, posts etc. and openings not exceeding 0.5 sq. mt. Each and no additions shall be made for reveals, jambs, soffits; sills etc. of these opening for finish of plaster around ends of joints, beams posts, etc.
- Deduction for opening exceeding 0.5 Sq.Mt. but not exceeding 3.0 sq. mt. Each shall be made as follows and no additions shall be made for reveals, jambs, soffits sills etc. of these openings.
- When both faces of walls are plastered with same plaster, deduction shall be made for one face only.
- When two faces of walls are plastered with different types of plasters or if one faces is plastered and the other pointed, deduction shall be made form the plaster or pointing on the side of frames for door, windows, etc. on which width of reveals is less than that on the other side but not deductions shall be made on the other side. Where width or reveals on both faces of all are equal, deductions of 50% of area of opening on each face shall be made from area of plaster and/or pointing as the case may be.
- h. For openings having door frames equal to projecting beyond the thickness of wall, full deduction for opening shall be made from each plastered face of the wall.
- i. In case of openings of area above 3 Sq.Mt. each, deduction shall be made for opening But jambs, soffits and sills shall be measured.
- j. The rate shall be for a unit of Sq.Ft.

ITEM NO.10:-20MM THICK SAND FACED PLASTER

20mm Thick Sand Faced cement plaster on walls up to height of 10 mt. and above

ground level consisting of 12 mm thick backing coating of c.m. 1:3 (1 cement :3sand) and 8 mm thick finishing coat in c.m 1.1 (1 cement: 1 sand) etc. complete.

Materials: Water shall conform to M-12, Cement mortar shall conform to M-12.

Workmanship:

The work shall be carried out in the coats. The backing coat (base coat) shall be 12 mm thick in c.m. 1:3. The relevant specifications of Item No. 25 shall be followed except that the thickness of back coat shall be 12 mm average. Before the first coat hardens its surface shall be beaten up by edges of wooden tappers and close dents. The subsequent coat shall be applied after this coat has been allowed to set for 3 to 5 days depending upon the weather conditions. The surface shall not be allowed to dry during this period.

The second coat shall be complete to 8 mm thickness in c.m. 1:1 as described above including raising sand facing by busing. The sample of sand face shall be approved before the work is started. The whole work shall be carried out uniformly as per sample approved.

Curing: The curing shall be started overnight after finishing of plaster. The plaster shall be kept wet for a period of 7 days. During this period, it shall be protected from all damages.

Mode of measurement and payment:

The relevant specifications of ITEM NO.9 shall be followed except that the sand face plaster on outside up to m., above ground level shall be measured under this item. The rate shall be for a unit of one Sq.Ft.

ITEM NO.11:-FLUSH DOORS, WINDOW& GLAZED

Doors and windows are as per detail specification on attached list at last page. Door shutters will be readymade as per specification. Aluminium windows and vents are with aluminum framing as per specification.

The rate shall be for a unit of one Sq.Ft.

ITEM NO. 12:-KOTA FLOORING

Kota stone slab flooring over 20mm (average) thick base of cement mortar 1:6 (1 cement 6 coarse sand) or L.M. 1:1.5 laid over and jointed with grey cement slurry including rubbing and polishing complete.30 mm thick.

Materials: Water shall conform M.1, Lime mortar shall conform to M-10, Cement mortar shall conform to M-11 polished Kota stone shall conform to M-49.

Workmanship:

Each slab shall be cut to the required size and shape and fine chisel dressed at all the edges. The sides thus dressed shall have a full contact if a straight edge is laid along. The sides shall be table rubbed with coarse sand before paving. All angles and edges of the slabs shall be true square and free form chippings and giving a plane surface. The thickness shall be 25 mm.(average) as specified in the item but not less than 20 mm at any place of the slab.

Bedding for the Kota stone slabs shall be cement mortar 1:6 (1 cement 6 coarse sand or L.M. 1:1.5 of average thickness 20 mm as given in the description of the item. The sub grade shall be cleaned, wetted and mopped. Mortar of the specified mix and thickness shall then be spread on an area sufficient to receive one Kota stone slab; the slab shall be washed clean before laying. It shall be laid on top pressed, tapped gently to bring it in level with the other

slab. It shall then be lifted and laid aside top surface mortar than shall be corrected by adding fresh mortar at hollows or depressions. The mortar shall then be hardening bit. Over this surface. Cement slurry of hunny life consistency shall be applied. The slab shall then be gently placed in position and tapped with wooden mall ate till it is properly padded in level with and close to the adjoining slab. The joint shall be as fine as possible. The slabs fixed in the floor adjoining the wall shall an enter not less than 10 mm under the plaster, skirting or dado. The junction between the walls and floor shall be finished neatly. The finished surface shall be true to level and slops as directed.

The floor shall be kept wet for a minimum period of 7 days. So that the bedding and joints are set properly.

Polishing shall normally commence after 14 days of laying the stone slab. The first polishing beaten with carborundum stones of 120 grade grit fitted in the heavy machine and then second polishing shall be done with carborundum stone of 220 to 350 grade grit fitted in heavy machine. Water shall be properly used during polishing. The stone shall then be washed with clean water. When directed by the Engineering in charge, wax polished of approved quality shall be applied on the surface with the help of soft cloth over a clean and dry surface. Then the polish machine fitted with bobs shall be run over it.

The holes required for nahni traps, pipes any other fittings shall be made without any extra cost.

Mode of measurement and payment:

Rate shall include cost of all materials and labor involved in the operation described in above. The Kota stone flooring shall be measured in Sq.Mt. correct to two places of decimal, length and breadth shall be measured correct to a centimeter and between finished face of skirting dado or wall plaster and no deduction shall be made for extra paid for any opening in floor of area up to 0.1 sq. mt.

The rate shall be for a unit of one Sq.Ft.

ITEM NO. 13:-VITRIFIED FLOORING

Providing & laying Vitrified tiles 8 to 10 mm thick in flooring, treads of steps & landing laid on a bed of 12 C.M. 1:8 (1 Cement : 8 Coarse sand) Finished with flush mm thick pointing in white or colour cement. Size 24"× 24"

The vitrified flooring material shall be of best quality as approved by Architect/consultant. The vitrified tiles should be of vermora or equivalent. The thickness of the vitrified tiles is upto 8 to 10mm thick and bed of cement mortar 1:8 (1cement: 8 coarse sand) is 12mm on which the tiles will laid. The junction between the wall floors shall be finished neatly. The finished surface shall be true to level and slops as directed.

Mode of measurement and payment:

Rate shall include cost of all materials and labor involved in the operation described in above. The Vitrified flooring shall be measured in Sq.Mt. correct to two places of decimal, length and breadth shall be measured correct to a centimeter and between finished face of skirting dado or wall plaster and no deduction shall be made for extra paid for any opening in floor of area up to 0.1 sq. mt.

The rate shall be for a unit of one Sq.Ft.

ITEM NO. 14:- TERRACE WATER PROOFING

Providing and laying china mosaic water proofing treatment on terrace including

applying neat cement slurry 2.75 Kg./Sq.Mt. of cement admixed with water proofing compound after cleaning the surface (b) laying cement concrete using brick bats 25 to 100 mm size with50% C.M. 1:5 (1cement :5coarse sand) admixed with water proofing compound over 20mm thick layer of C.M. 1:5 to required slope including rounding of junction of walls and slabs(c) after two days of proper curing applying a second with 20mm thick C.M. 1:4 and China mosaic tiling and finally finishing the surface with trowel white cement slurry (d)after finishing the whole terrace shall be flooded with water for a period of two weeks.

The waterproofing material shall be of best quality as approved by the Engineer-in-Charge. They shall be proportion recommended by the manufacturer. They shall be free from Foreign Matter.

Mode of measurement and payment:

The work shall be measured for finished item in Square Ft.

The rate shall be for a unit of one Sq.Ft.

ITEM NO. 15:-INTERNAL PAINT

Wall painting (two coats) with plastic emulsion of plastic emulsion paint of approved brand and manufacture on wall surface to give an even shade including thoroughly brushing the surface Free from mortar dropping and other foreign matter and sand papered

Materials: The water shall conform to M – 1. Cement waterproofing shall conform to I.S. 5410-1969.

Workmanship:

Scaffolding:

Where scaffolding is necessary it shall be erected in such a way that as far as possible on part of scaffolding shall rest against the surface to be white or colour washed. A properly secured strong and well tied suspended platform (Zoola) may be used for whitewashing. Where ladders are used, pieces of old gunny bags/shall be tied/at top and bottom to prevent scratches to the floors and walls. For whitewashing of ceilings proper stage scaffolding shall be erected where necessary.

Preparation of Surface:

The surface shall be thoroughly cleaned of all dust, dirt, mortar cropping's & other foreign matter before water proofing cement is applied. The surface spoiled by smoke soot shall be scraped with steel wire brushes or steel scrapers or shall be rubbed with over burnt surkhi or brick bats. The surface shall be then broomed to remove all dust, dirt & shall be washed with clean water before the waterproofing paint is applied.

Oil or grease spots shall be removed by suitable chemical & smooth surface shall be rubbed with wire brushes.

All unsound portions of the surface plaster shall be removed to full depth of plaster in rectangular patches & Plastered again after raking the masonry joints properly. Such portion shall be wetted & allowed to dry. They shall be given one coat of water proofing paint.

All unnecessary nails shall be removed; the holes cracks patches etc. shall be made good with materials similar in composition to the surface to be applied.

Preparation of paint:

Portland cement shall be prepared by adding paint powder to water and stirring to obtain a thick paste, which shall then be diluted to a brush able consistency. Generally, equal volumes of paint powder and water make a satisfactory paint. In all cases, the manufacturer's instructions shall be followed. The paint shall be mixed in such quantities as can be used up

within an hour of mixing as otherwise the mixture will set and thickness, affecting flowing and finish. The libs of cement paint drums shall be kept tightly when not in use.

Applications of paint:

No painting shall be done when the paint is likely to be exposed to a temperature of below 7degree centigrade within 48 hours after application. When weather conditions are such as to cause damage the work shall be carried out "in the shadow" as far as possible. This helps the proper hardening of the paint film by keeping the surface moist for a longer period. To maintain the uniform mixture and to prevent segregation, the paint shall be bestirred recently in the bucket. For undercoated surfaces, the surfaces shall be treated with a minimum of two coats of waterproof cement paint. Not less than 24 hours shall be allowed between two coats. Next coat shall not be started until the preceding coat has become sufficiently hard to resist marking by the brush being used. In hot dry weather, the preceding coat shall be allowed between two coats. Next coat shall not be started until the preceding coat has become sufficiently hard to resist marking by the brush being used. In hot dry weather, the preceding coat shall be slightly moistened before applying the subsequent coat. The finished surface shall be even and uniform in shade, without patches, brush masks, paint drops etc. The cement paint shall be applied with a brush with relatively short stiff hg or fibers bristles. The paint shall be brushed in uniform thickness and shall be free from excessive heavy brush marks. The lamps shall be well brushed out. Waterproof cement paint shall not be applied on surfaces already treated with whitewash colour wash, distemper dry or oil bound varnishes, paint etc. It shall not be applied to wood and metal surfaces.

Curing:

Painted surfaces shall be sprinkled with water two or three times a day. This shall be done between coats and for at least two days following the final coat. The curing shall be started as soon as the paint has hardened so as not to be damaged by the sprinkling of water say about 12 hours after the application.

Mode of measurements & payment:

All the work shall be measured in the decimal system as under:

- (a) Dimensions shall be measured to the nearest 0.01 metre.
- (b) Area in individual items shall be worked out to the nearest 0.01 Sq.Metre.
- (c) All the work shall be measured in Sq.Metre. Deductions for jambs, soffits, sills etc. For opening not exceeding 0.5 Sq.Metre. each in area for ends of joints, posts, beams, girders, steps etc. not exceeding 0.5 Sq.Mt. each in area and for opening exceeding 0.3 Sq.Mt. and not exceeding 3.0 Sq.Mt. each in area deduction and additional shall be made as under:
 - (i) When both the faces and walls are provided with finish, deduction shall be made for one face only.
 - (ii) When each face of wall is provided with different finish deduction shall be made for that side of frame for doors, windows, etc. on which width of reveals is less than that of the other side, where width of reels on both faces of wall are equal, deduction of 50 % of area of opening on each face shall be made from total area of finish.
 - (iii) When only one face of wall is treated and the other face is not treated, full deduction shall be made if the width of reveal on the treated side is less than that on the untreated side, but if the width of the reveal is equal or more than on the untreated side neither deductions not additions be made for reveals, jambs, soffits, sills etc.In case of area of opening exceeding 3 Sq.Mt. each, deduction shall be made for opening but jambs, soffits, shall be measured. No deduction shall be made for attachment such as casing, conducts, pipe, electric wiring and the like.

The rate shall include the cost of all materials, labor, scaffolding, protective measured etc. involved in all the operations described above.

ITEM NO. 16:- EXTERNAL PAINT

Finishing wall with water proofing cement paint of on wall surfaces (Three coats) to give an approved brand & manufacture of required shape even shade after thoroughly brushing the surface to remove all dirt & remains of loose powdered materials.

Materials: The water shall conform to M-1. Cement waterproofing shall conform to I.S. 5410-1969.

Workmanship:

Scaffolding:

Where scaffolding is necessary it shall be erected in such a way that as far as possible on part of scaffolding shall rest against the surface to be white or colour washed. A properly secured strong and well tied suspended platform (Zoola) may be used for whitewashing. Where ladders are used, pieces of old gunny bags/shall be tied/at top and bottom to prevent scratches to the floors and walls. For whitewashing of ceilings proper stage scaffolding shall be erected where necessary.

Preparation of Surface:

The surface shall be thoroughly cleaned of all dust, dirt, mortar croppings & other foreign matter before water proofing cement is applied. The surface spoiled by smoke soot shall be scraped with steel wire brushes or steel scrapers or shall be rubbed with over burnt surkhi or brick bats. The surface shall be then broomed to remove all dust, dirt & shall be washed with clean water before the waterproofing paint is applied.

Oil or grease spots shall be removed by suitable chemical & smooth surface shall be rubbed with wire brushes.

All unsound portion of the surface plaster shall be removed to full depth of plaster in rectangular patches & plastered again after raking the masonry joints properly. Such portion shall be wetted & allowed to dry. They shall be given one coat of water proofing paint.

All unnecessary nails shall be removed; the holes cracks patches etc. shall be made good with materials similar in composition to the surface to be applied.

Preparation of paint:

Portland cement shall be prepared by adding paint powder to water and stirring to obtain a thick paste, which shall then be diluted to a brush able consistency. Generally, equal volumes of paint powder and water make a satisfactory paint. In all cases, the manufacturer's instructions shall be followed. The paint shall be mixed in such quantities as can used up within an hour of mixing as otherwise the mixture will set and thickness, affecting flowing and finish. The libs of cement paint drums shall be kept tightly when not in use.

Applications of paint:

No painting shall be done when the paint is likely to be exposed to a temperature of below 7

degree C within 48 hours after application.

When weather conditions are such as to cause damage the work shall be carried out "in the shadow" as far as possible. This helps the proper hardening of the paint film by keeping the surface moist for a longer period.

To maintain the uniform mixture and to prevent segregation, the paint shall be bestirred recently in the bucket.

For undercoated surfaces, the surfaces shall be treated with minimum two coats of waterproof cement paint. Not less than 24 hours shall be allowed between two coats. Next coat shall not be started until the preceding coat has become sufficiently hard to resist marking by the brush being used. In hot dry weather, the preceding coat shall be allowed between two coats. Next coat shall not be started until the preceding coat has become sufficiently hard to resist marking by the brush being used. In hot dry weather, the preceding coat shall be slightly moistened before applying the subsequent coat.

The finished surface shall be even and uniform in shade, without patches, brush masks, paint drops etc. The cement paint shall be applied with a brush with relatively short stiff hg or fibers bristles. The paint shall be brushed in uniform thickness and shall be free from excessive heavy brush marks. The lamps shall be well brushed out. Waterproof cement paint shall not be applied on surfaces already treated with whitewash colour wash, distemper dry or oil bound varnishes, paint etc. It shall not be applied to wood and metal surfaces.

Curing:

Painted surfaces shall be sprinkled with water two or three times a day. This shall be done between coats and for at least two days following the final coat. The curing shall be started as soon as the paint has hardened so as not to be damaged by the sprinkling of water say about 12 hours after the application.

Mode of measurements &payment:

All the work shall be measured in the decimal system as under:

- (a) Dimensions shall be measured to the nearest 0.01 M.
- (b) Area in individual items shall be worked out to the nearest 0.01 Sq.Mt.

All the work shall be measured in sq.mt. Deductions for jambs, soffits, sills etc.for opening not exceeding 0.5 sq.mt. Each in area for ends of joints, posts, beams, girders, steps etc. not exceeding 0.5 sq.mt. Each in area and for opening exceeding 0.3 sq.mt. and not exceeding 3.0 sq.mt. each in area deduction and additional shall be made as under:

- a) When both the faces and walls are provided with finish, deduction shall be made for one face only.
- b) When each faces of wall is provided with different finish deduction shall be made for that side of frame for doors, windows, etc. on which width of reveals is less than that of the other side, where width of reveals on both faces of wall are equal, deduction of 50 % of area of opening on each face shall be made from total area of finish.
- c) When only one face of wall is treated and the other face is not treated, full deduction shall be made if the width of reveal on the treated side is less than that on the untreated side, but if the width of the reveal is equal or more than on the untreated side neither deductions not additions be made for reveals, jambs, soffits, sills etc. In case of area of opening exceeding 3 sq.mt. Each, deduction shall be made for opening but jambs, soffits, shall be measured.

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA

No deduction shall be made for attachment such as casing, conducts, pipe, electric wiring and the like.

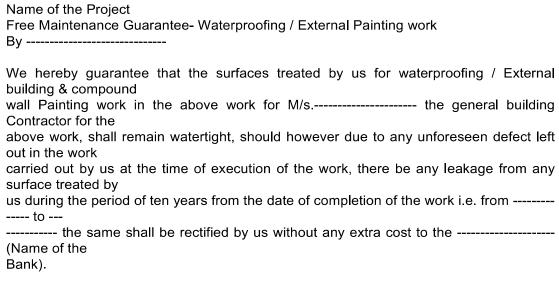
The rate shall include the cost of all materials, labor, scaffolding, protective measured etc. involved in all the operations described above.

The rate shall be for a unit of one Sq.Mt.

	Signature of the Tenderer/s Vith the Seal of the Company	
Dat	Pate:	
Plac	lace:	
	SCHEDULE OF PROPOSED SITE ORGANISATION	
	The Tenderer is to indicate here the proposed site organization he propose execution of the work. It is understood that this will be augmented fror depending upon the requirement for timely construction of work, as directe in-charge.	n time to time
	BIO-DATA OF SITE-IN-CHARGE & KEY PERSONNEL	
	SIGNATURE OF TENDERER	
	Certified that the above information is correct SIGNATURE OF	TENDERER

Proforma - 6

FORM OF GUARANTEE FOR WATER PROOFING / EXTERNAL PAINTING



However, we shall not be responsible in any way if our work is tampered with or if the body of the

structure is damaged due to sinking, cracking and or by any other act of god beyond our control.

Signature of Contractor

12. MAKE OF MATERIALS - CIVIL/SANITARY/PLUMBING

No.	ltem	Name of Make / Specification
1	Cement	Ambuja, Ultratach, ACC, JK Cement (Grade 53)
2	White Cement	Birla White, J.K.
3	Steel (FE 500 STEEL TMT BARS /FE500D STEELTMT BARS)	TATA, SAIL, NATIONAL, JINDAL
4	Vitrified Tiles	Somany, Kajaria, HR Johnson, Nitco, ASL
5	Ceramic Tiles	Somany, Kajaria, HR Johnson, Nitco, ASL
6	Ceramic Floor Tiles	Somany, Kajaria, HR Johnson, Nitco, ASL
7	Wall Tiles	Somany, Kajaria, HR Johnson, Nitco, ASL
8	Kota stone/Baroda Green Marble/Granite/Jaisalmer Stone	Sample approved by Architect/Bank
9	Flush Door	Century, Kitply, Greenply, Anchor, Orchid
10	a) PVC Door b) FRP Door	a) Heavy Duty Sintexb) Durian, Astral Windows, Durofenster, Gujcon, Engineer ply, Future Fabtech, 7 star
11	Aluminium Section	Banco, Jindal, National, Tata steel (With Aluminium Framing)
12	Orissa type water closet	Parryware, Hindware, Cera, Bell, Jaquar(esso)
13	European WC	Hindware / Cera / Parryware/ Jaguar
14	Wash basin	Cera, Bell, Jaquar (esso), Parryware, Hindware
15	Urinals	Hindware / Cera / Parryware/ Jaguar
16	Sanitary Fixtures	Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo
17	Flush Cock	Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo
18	Bib cock	Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo
19	Long body Bib cock	Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo
20	Pillar Cock	Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo
21	Angle Cock	Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo
22	Wash Coupling	Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo
23	Towel Ring	Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo
24	SS Kitchen Sink	Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA

		INDIA
25	Pressure Polythene Pipe	Astral, Supreme, Prince
26	RCC pipe	Indian Hume Pipe Co., Alcock Cement Products, Patel Spun (Surat)
27	G.I. Pipe	Tata, Jindal, Zenith
28	Water Proofing Admixture	Pidilite, Roff, Dr. Fixit Fosrockor
29	Paint	Asian / Nerolac / Dulex / Berger
30	Internal Paint	Asian / Nerolac / Dulex / Berger
31	Exterior Paint (Weatherproof)	Asian / Nerolac / Dulex / Berger
32	MS Handrail	Made of structural section like pipe, square or round bar with MS Flat, Plain Grill
31	MS Grill	Made of structural section like pipe, square or round bar with MS Flat, Plain Grill
32	PVC Water Storage Tank Triple Layered	Syntex, RC Plasto, Supreme Industries
33	Laminates/Decorative Laminates	Archidlam, National, Formica, Greenlam, Merino
34	Door closer/Floor Spring	Dorma, Euro, Ozone, Enox, Ebco, Hamco
35	Locks	Godrej / Haffle / Hettich / Ebco
36	Stainless Steel Hardware fittings	Dorma, Euro, Ozone, Enox, Ebco, Hamco

Signature & seal of th	e Tenderer

NOTES & SPECIFICATIONS FOR ELECTRICAL WORKS:

- Contractor must submit Break-ups of wire lengths and verify all lengths.by architect in presence of authority before concealing that.
- All the electrical wiring to be **concealed** & not to have any wires exposed. Even in the Furniture, the wires to pass through the Electrical conduits.
- Telephone wire to be carried in separate Conduit.
- Security siren cable to be carried in separate conduit.
- T. V. cable to be carried in separate conduit.
- Any additional work that needs to be carried out should be requested from the concerned authorities. Any such works done without the previous approval shall not be paid for.
- Contractor to clarify all the works to be done, with the Architect, before commencing the work.
- Contractor will be considered responsible for any loss to the Electrical works, during the progress of work. Hence, the Electrical contractor is advised to lies with the Main Contractor (Civil Contractor).

MAKE OF MATERIALS - ELECTRICAL WORKS

Items	Make
Electrical Accessories (Switches, Plugs etc)	ABB/ Legrand/ MK/ANCHOR/ELLEYS/ROMA Crabtree, Havell's, GM
Wires	Polycab, RR cable, Finolex, Havells, KEI
Ceiling Fan / Wall fan M.C.B/ELCB	Crompton Greaves, Havells, Orient,Bajaj,Usha Hager, Havells, MDS, L&T, ABB, Legrand, Siemens, Schneider
Cables	Finolex/Polycab/Havells/RR kabel/KEI
Telephone Cable	Skytone/ Delton/ NICCO/Polycab/ Finolex
Decorative Spot/ Wall lights: Make	Philips, Wipro (As advised by Architect)
LED – Light Fixtures	Crompton, GE, Wipro
D.B. Box	Legrand/ Schneider/ ABB/Siemens
Exhaust Fan	Crompton, Khaitan, Anchor, Havells, Orient,Bajaj,Usha
Casting Patti	Plasto Plast

^{*} Electrical Contractor to obtain the Approval of the Concerned Authority before the Final Purchase of the Material.

- * Approvals from any gov. authorities to be obtained by the Electrical Contractor
- * The contractor will required to submit purchase invoices of materials used/to be used in works , if demanded by Bank/Architect.
- * All Charis or Chases in Walls / Columns / Slabs made by the contractor for Installation
- * of Conduits / S.B. / Boxes Etc. The filling of the Same Is In the scope of the Contractor
- * Including all necessary material and labour.

Contractor's Sign & stamp	Date

[.] Electrical contractor will have to provide the service whenever the execution work is undergoing.

ENVELOPE - 2

FINANCIAL BID

FOR

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN BUILDING AT PLOT WITH OLD SURVEY NO. 31/1, VILLAGE-BORKHET, P.O. GODALVIHIR, TEHSIL-AHWA, DISTRICT-DANG, GUJARAT, INDIA

Tender will be addressed to Bank of Baroda, Regional office, Valsad Region, 1st Floor, Mahalaxmi Tower, Tithal Road, Valsad - 396001,Gujarat, India.

Tenders will be submitted to the following address

CLIENT: -

BANK OF BARODA, REGIONAL OFFICE, VALSAD REGION, 1st FLOOR MAHALAXMI TOWER, TITHAL ROAD, VALSAD - 396001, INDIA

ARCHITECT: -

M/S.SHYAMAL GANDHI & ASSOCIATES

ARCHITECTS / INTERIOR DESIGNERS / PLANNER

21, VIRNAGAR SOC. OPP. I.D.B.I. BANK,

BHIMJIPURA, NEW WADAJ, AHMEDABAD-380013

(m) 9016310164 e-mail – sgassociate21@gmail.com

ABSTRACT SHEET - BSVS AHWA, DISTRICT DANG

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN BUILDING AT PLOT WITH OLD SURVEY NO. 31/1, VILLAGE-BORKHET, P.O. GODALVIHIR, TEHSIL-AHWA, DISTRICT-DANG, GUJARAT, INDIA

	Abstract				
SI. No.	Particulars	Amount			
1	Civil Works				
2	Underground Water Tank				
3	Bore well works				
4	Compound Wall Works				
5	Infrastructure Works				
6	Septic Tank Works				
7	Soak Pit Works				
8	Fire Protection System				
9	Electrical Works				
10	Total Amount				
11	Discount, If Any				
12	Total Amount (After Discount)				
13	GST:%				
14	Total Net Amount in Numbers (Sr. 12 + Sr. 13) (Inclusive of GST)				
15	Total Net Amount in Words :(Inclusive of GST)				

We agree and Undertake that - Quoted rates are inclusive of GST applicable as per the prevailing norms on the last date of submission of Financial Bid.

	BILL OF QUANTITY FOR CIVIL WO	ORKS OF	BSVS A	T AHWA, DIS	T. DANG
Item no.	Particulars	Qty	Unit	Rate In Rs.	Amount In Rs.
	EXCAVATION				
1	Excavation for foundation upto 1.5 Mt Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to all lead.(B) Loose or Soft Soil	218.70	Cu.Mt		
2	Excavation for foundation 1.5 to 3.0 Mt Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to all lead.(B) Dense or hard soil	245.25	Cu.Mt		
4	Filling Excavated Earth in Trenches.				
	Filling available excavated earth (excluding rock) in Trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth consolidating each deposited layer by ramming and watering).	299.00	Cu.Mt		
5	Filling with murrum or selected soil				
	Filling in foundation and plinth with murrum or selected soil in layer of 20 cm thickness including watering ramming and consolidating etc.	364.00	Cu.Mt		
6	Rubble solling				
	Providing and laying 230 mm thick rubble soling including spreading the stone aggregates for soiling and WBM including filling the intersices forming the surface to required camber and gradient. and spreading murrum or sand blindage or road crushed filling the gaps in metal levelling to camber and gradient as directed.	208.00	Cu.Mt		
7	PLAIN CONCRETE WORK				
0	Providing and laying Cement Concrete (PCC) 1:3:6 (1Cement : 3coarse sand : 6crushed stone aggregates 40m mm nominal size) and curing complete including cost of form work in Foundation and plinth.	73.00	Cu.Mt		
8	R.C.C. WORKS Providing and laying controlled cement				
	concrete M.25 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete. (more than 10 ton)	65.00	Cu.Mt		
9	Providing and laying controlled cement concrete M.25 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (D) Columns, Pillars posts and struts, upto floor two level. (more than 10 ton)				
Α	RCC Columns, Pillars with shuttering	16.00	Cu.Mt		
	Columns, Pillars up to (ground floor)				

		INDIA	0 14	T
В	Columns, Pillars for ground floor	13.00	Cu.Mt	
	Calimana Dillara for 4-4 floor	40.00	O . N.44	
С	Columns, Pillars for 1st floor	12.00	Cu.Mt	
	O. I. Dill. f	7.00	0 111	
F	Columns, Pillars for terrace floor	7.00	Cu Mt	
10	Providing and laying controlled cement concrete M.25 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (C) Slabs,landing,shelves,Balconies, Lintels, Beams, Girders and Cantilever upto floor two level. (more than 10 ton)			
	Beams, lintels, Girders etc			
Α	Beams, Girder, lintels up to (Ground floor)	62.00	Cu.Mt	
В	Beams, Girder, lintels for 1st floor	54.00	Cu.Mt	
С	Beams, Girder, lintels for 2nd floor	50.00	Cu.Mt	
D	Beams, Girder, lintels for 3rd floor	4.00	Cu.Mt	
11	Providing and laying exposed controlled cement concrete M.25 with smooth finishing and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (C) Slabs,landing,shelves,Balconies Lintels, Beams, Girders and Cantilever upto floor two level with necessary approved chemical as directed by Bank/consultant. (more than 10 ton)			
Α	Slabs, landing, balconies,for Ground floor	49.00	Cu.Mt	
В	Slabs, landing, balconies, for 1st floor	57.00	Cu.Mt	
C	Slabs, landing, balconies, for 2nd floor	72.00	Cu.Mt	
D	Slabs, landing, balconies, for 3rd floor	4.00	Cu.Mt	
		1.00	Janvie	
12	Providing and laying controlled cement concrete M.25 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in Staircase.			
Α	Staircase for Ground floor	6.00	Cu.Mt	
В	Staircase for 1st floor	4.00	Cu.Mt	
14	Reinforcement			
	Providing TMT Bar FE 500/500D reinforcement for R.C.C. work in lintel beam, coloumn, footing, base slab, roof slab, tanks, staircase, chajja etc. including cutting, bending, binding and placing in position complete.			
Α	Reinforcement up to (ground floor)	11.56	MT	
В	Reinforcement up to floor two level (ground floor)	18.11	MT	
С	Reinforcement for 1st floor	18.72	MT	
D	Reinforcement for terrace floor	2.48	MT	

	T	INDIA			T
	Masonary work				
15	BRICK WORK				
	Brick work using common Burnt clay				
	building bricks having crushing strength not				
	less than 35 Kg./Sqcm. in cement mortar				
	1:5 (1cement : 5 fine sand)				
	CONVENTIONAL				
Α	Masonary in Foundation and plinth	79.00	Cu.Mt		
В	Masonary work up to floor two level	54.00	Cu.Mt		
Ь	(ground floor)	34.00	Cu.ivit		
С	Masonary work for 1st floor	71.00	Cu.Mt		
D	Masonary work for terrace	32.00	Cu.Mt		
16	BRICK WORK				
	(i) Half brick masonry in common brunt clay				
	building bricks having crushing strength not				
	less than 35 Kg/Sq.Cm. in Cement mortar				
	1:4 (1- Cement : 4 -coarse sand) in				
	foundation and plinth (B) Conventional (upto				
	10 ton)				
Α	Masonary work up to floor two level	268.00	Sq.Mt		
	(ground floor)		•		
В	Masonary workt for 1st floor	535.00	Sq.Mt		
С	Masonary work for terrace	14.00	Sq.Mt		
	Plastering				
17	Internal Plaster on Walls				
	Providing 15mm thick cement plaster in				
	single coat on Rough (Similar)side of single				
	or half brick walls for interior plastering upto				
	floor two level and finished even and smooth				
	in (iii) Cement mortar 1:6 (1-cement:6-sand)				
	FINISHING with floting coat of neat cement				
	slurry with Curing shall start 24 hours after				
	the plaster is laid. It shall be kept wet for 14				
	days. During this period, it shall be suitably				
	protected from (POP/NEERU) all damages				
	at the contractor's cost by such means as approved by the Engineer-in-charge.				
	Internal plaster on walls up to floor two				
Α	level (ground floor)	1085.00	Sq.Mt		
В	Internal plaster on walls for 1st floor	1403.00	Sq.Mt		
E	Internal plaster on walls for Terrace floor	44.00	Sq.Mt		
	internal placer on walls for refrace floor	77.00	Oq.ivit		
18	External Plaster				
10	Providing 20 mm thick double coat mala				
	cement plaster on interior brick / concrete				
	work for plastering comprising of base coat				
	of 12 mm thick cement plaster in cement				
	mortar (1 Cement: 4 coarse sand) in rough				
	finishing and 8 mm thick top coat of cement				
	mortar 1:2 (1 Cement: 2 Coarse sand)				
	finished with trovel including scaffolding				
	curing etc. complete.				
Α	External plaster up to floor two level	468.00	Sq.Mt		
·			•	1	

	(ground floor)	INDIA		
В	External plaster for 1st floor	431.00	Sq.Mt	
E	External plaster for Terrace floor	273.00	Sq.Mt	
	'		•	
19	Ceilling Plaster			
	Providing 10mm thick cement plaster in			
	single coat on brick/concrete walls for interior			
	plastering upto			
	floor two level and finished even and smooth			
	in (i)Cement mortar 1:3 (1-cement:3-sand).	400.00	0.14	
<u> </u>	Ceilling plaster for ground floo)	463.00	Sq.Mt	
В	Ceilling plaster for 1st floor	409.00	Sq.Mt	
E	Ceilling plaster for Terrace floor	19.00	Sq.Mt	
20	Providing throating or plaster drip and	40.40		
20	moulding to R.C.C. Chhajja or projection. (For all Floor)	42.42	rmt	
	Providing cement vata (10cm. x 10 cm. size)			
	quarter round in cement mortar 1:1 including	400.00		
21	neat cement finishing, watering etc.	138.00	rmt	
	complete.			
	Paving and Floor Finishers			
22	Vitrified Flooring Work			
	Providing & laying 24" x 24" Vitrified 10 mm			
	thick tile flooring over 20 mm (average) base			
	of cement mortar 1:6 (1 cement: 6 coarse			
	sand) using cementitious Adhesive Materials			
	as per Architect/Bank instruction. New surface finished with the help of white			
	cement, cement colour if require, filler of			
	approved make and cleaning the surface etc.			
	comp. for antiskid For flooring, landing, in			
	desired colours, finishes, Matt finish			
	including Making 4mm spacer at joint of tiles	611.00	Sq.Mt	
	and fill the spacer with epoxy jointing			
	material with flush pointing in white cement &			
	pigment with residue and skirting, incl.			
	curing, polishing & cleaning with mild oxalic acid etc. complete for all floors / all levels			
	etc.) Light & Dark colour Rates are including			
	laying and removing of floor protection sheet			
	etc. complete. (work for all the floors).			
	Sample/tile finish to be approved by			
	Architect/Bank.			
23	Telephone Black Granite flooring in foyer			
	Providing and laying Telephone Black Granite slab of 18 mm thick (Single piece) in			
	Granite slab of 18 mm thick (Single piece) in flooring, tread of steps & landing laid on a			
	bed of 12mm thick (Average) base of cement			
	mortar 1:6 (1cement: 6 coarse sand) finished	35.00	Sq.Mt	
	with flush pointing in white or colour cement			
	with necessary rubbing, polishing,			
	chamfering, etc. complete. Shade. Colour &			
	shade aprooved by Architect / Bank.			
24	Telephone Black Granite flooring in			
	staircase			

		INDIA		
	Providing and laying Telephone Black Granite slab of 18 mm thick (Single piece) in flooring, tread of steps & landing laid on a bed of 12mm thick (Average) base of cement mortar 1:6 (1cement: 6 coarse sand) finished with flush pointing in white or colour cement with necessary rubbing, polishing, chamfering, etc. complete. Shade.Colour & shade aprooved by Architect / Bank.	22.00	Sq.Mt	
25	Granite skirting in skirting, dedo and riser of steps			
	Providing and laying Granite slab of 18 mm thick (Single piece) in risers of steps,skirting Dedo and pillars laid on 10mm thick cement mortar 1:3 (1-Cement : 3 coarse sand) and jointed with gray cement slury mixed with pigment to match the shade of slab including including necessary rubbing, polishing, chamfering etc. complete. (upto 10 ton)Shade.Colour & shade aprooved by Architect / Bank.	12.00	Sq.Mt	
26	Granite D/W framing and wall clading			
	Providing and laying Machine cut, Free edges, Machine polished Granite 18 mm thick (Single piece) in doors windows framing and wall clading as per design includign half rounded moulded both edge, 1 cm nosing laid on a bed of 10 mm thick (Average) base of cement mortar 1:3 (1cement: 3 coarse sand) jointed with matching colour cement slurry including including necessary rubbing, polishing, chamfering etc. complete. Shade.Colour, shade approved by Architect / Bank.	130.00	Sq.Mt	
27	Toilet & Bath Flooring			
	Providing and laying Ceramic (Glazed Vitrified Tiles) tiles 9-10 mm thick in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1-cement: 3- coarse sand) and providing 4mm spacer at joint and fiied with epoxy filler material in selected colour (Size - 0.60 Mt. X 0.60 Mt.).Colour, shade and finish to be approved by Architect / Bank.	95.00	Sq.Mt	
28	Wall Tiles In Toilet & Bath - Dado tiles			
20	Providing and laying CERAMIC (Glazed Vitrified Tiles) tiles 9-10 mm thick in skrting risers of steps and dedo on 10mm thick cement plaster 1:3 (1-cement: 3- coarse sand) and jointed with white cement slurry and providing 4mm spacer at joint and fiied with epoxy filler material in selected colour (Size - 0.60 Mt. X 1.20 Mt.) Colour, shade and finish to be approved by Architect / Bank.	300.00	Sq.Mt	
29	Wall Tiles above kitchen platform - Dedo			

		INDIA		
	Providing and laying CERAMIC (GVT) tiles 9-10 mm thick in skirting risers of steps and dedo on 10mm thick cement plaster 1:3 (1-cement : 3-coarse sand) and jointed with white cement slurry and providing 4mm spacer at joint and filled with epoxy filler material in selected colour (Size - 0.60 Mt. X 0.60 Mt.)Colour, shade and finish to be approved by Architect / Bank.	20.00	Sq.Mt	
31	KITCHEN PLATFORM WITH WOODEN SHUTTER			
32	Constructing of Cooking platform (sandwich type) 80cm high resting on (75mm otli at base) on Kota stone in C.M 1:3 with providing and fixing 25 mm thick rough kota stone at bottom and 25mm thick Golden Galaxy / Black Telephone Granite stone (single piece) top and polished granite stone (single piece) 25mm thick on top with 75mm high machine cut polished Granite round moulded facia patty including polishing, rubbing, edge finishing, chamfering, etc. complete as per drawing and specification without stainless steel sink including necessary cutting for sink & making hole for gas pipe and fixing P.V.C bend of 25 mm dia. including Providing & fixing prefunctional service counter under granite platform having 12 mm +9 mm thick plywood as shutters both side 1.5 mm laminate finish including hinges, magnet, table chains, complete with bidding patties and all hardwares. All exposed and internal surfaces finished with 1 mm thick laminate of approved shade. All joints are covered with burma border bidding patti finished with laminate. complete including require nos of drawer and shutter all type of fittings, fixtures, hardware approved make etc complete .SS 304 grade conceal handle shall be provide as per approved selection & detailed drawing and instruction of Architect/consultant/Bank. Contractor has to provide all necessary cut outs (race ways.) for Electrical works & no extra payment shall be made for it.	9.00	Sq.Mt	
	produing in remot brook			

		INDIA		
	Providing and fixing Brick bat waterproofing treatment in toilet sunk including applying neat cement slurry 2.75 kg/sq.mt of cement admix with waterproofing compound after cleaning the surface.(b)laying cement concrete using brick bats 25 to 50 mm size with 50%cement mortar 1:5 (i cement;5 coarse sand) admixed with waterproofing compound over 20 mm thick layer of C.M.1:5 to require slope including rounding of junction or walls and slabs (c) after two days of proper curing applying a second coat of cement slurry. finally finishing the surface with trowel. (d) after finishing the whole sunk slab shall be flooded with water for a period of two weeks including 10-years water proofing guarantee as directed. Water proofing with Cool Roof Tile	143.00	Sq.Mt	
33	flooring			
	Providing and fixing Brick bat waterproofing treatment including applying neat cement slurry 2.75 kg/sq.mt of cement admix with waterproofing compound after cleaning the surface.(b)laying cement concrete using brick bats 25 to 50 mm size with 50%cement mortar 1:5 (i cement;5 coarse sand) admixed with waterproofing compound over 20 mm thick layer of C.M.1:5 to require slope including rounding of junction or walls and slabs (c) after two days of proper curing applying a second coat of cement slurry. finally finishing the surface with trowel. (d) after finishing the whole sunk slab shall be flooded with water for a period of two weeks. and Providing and laying Cool Roof Ceramic Tile flooring for terrace using 450 x 450 or 600 x 600 glazed cool roof tiles over 20 mm (average) base of cement mortar 1:3 (1 cement: 3 coarse sand) on new surface or fixing on existing flooring by adhesive material including jointed with color cement slurry including Making 4mm spacer at joint of tiles and fill the spacer with epoxy jointing material, finished with flush pointing & cleaning the surface etc complete selection as directed by Architect/Engineer in Charge.(Size: 0.60 Mt. X 0.60 Mt.) to be laid to plain or slope and to be tempered to bring mortar creme out upto surface using white cement including rounding off junctions and extending them upto 15 cm along the wall, clearing with water and oxalic acid etc. having 10 year water proofing guarantee as directed.	475.20	Sq.Mt	

	,	INDIA		_
	Terrace area Providing and laying roof insulation with 75 mm thick XPS board (4.5m2 / bag) size of 1.25 X 0.6mt, density 32-35 kg/m3 (as per ASTM D 1622), compressive strength 0.276 N/mm2 (as per ASTM D 1621), Thermal conductivity at10°C & 25°C C accordingly 0.014 W/m-K & 0.028 W/m-K as per IS 3346, and fire resistance property conforming to Class B2 as per DIN 4102 part 1. Application of board shall be as per standard specification & maintaining proper overlaps of 100 mm and above vertical as per manufacturer's specification to receive screed above it. Note: Plan area of terrace (in to in of parapet wall) shall be measured for payment.	453.20	Sq.Mt	
	Doors- Windows and steel work			
34	Aluminium section window - Three Track			
	Providing and fixing window having extruded aluminium Colour Anodizing of 15 micron thickness section frame main outer size 63.50 x 38.10 x 1.95 mm(of Jindal Section no:4605,@ Wt 1.094 Kg / Rmt), horizontal three track (including one track of SS mosquito net / wire mesh 304 / 202 Grade of window Size) member size 61.85 mm x 31.75 mm x 1.20mm (of Jindal Section no: 8687 @ wt.of 0.695 Kg/mt), vertical member of size 61.85 mm x 31.75mm x 1.30 mm (of Jindal Section no:8758 @ wt.of 0.0.659 Kg/mt) with sliding shutters of horizontal member size 40mm x 18mm x 1.29mm (of Jindal Section no:8949 @ wt.of 0.456Kg/mt), vertical member of size 40mm x 18mm x 1.29mm (of Jindal Section no:8947 @ wt.of 0.456Kg/mt/ Section 8948, @ Wt. 0.457 Kg/mt) with 5 mm thick transparent bronze colour tinted float glass with anodized aluminium fittings and fixtures and transparent silicon sealant glass fixing to frame as per details etc complete for window.	62.00	Sq.Mt	
35	Aluminium section ventilation			
	Providing and fixing standard extruded of aluminium louvered section of size 63.50 x 38.10 x 1.95 mm including SS mosquito net / wire mesh 304 / 202 Grade of vent Size(of Jindal Section no:4605, @ Wt 1.094Kg / Rmt with colour anodized of 15 micron thickness aluminium frame with 5 mm thick transparent bronze colour tinted float glass with colour anodized aluminium frame for ventilation with 5 mm thick frosted glass as details etc complete for window	6.00	Sq.Mt	
36	Stainless steel Railing			

		INDIA		
	Providing and fixing Stainless steel Railing side fitting 105X105 mm base plate with anchor fastener fitting. Top support of SS 304 grade pipe having size 50 mm dia (16 Gauge) as hand rail and Two no. of 16 mm dia intermediate pipe and 40 x 40 mm vertical pillar pipe at distance of 1 m c/c having height 1.00 Mt. high fixed in RCC/masonry wall including 12 mm toughened glass with fully frosted fitted on 16mm dia. ss pipe by studs having size of 22 X 16 mm. All jointing, welding as per detail with all labour, material, transportation etc. complete.	26.00	Rmt	
37	Flush door shutter			
	Providing Material & Labour charge for making laminate finish Flush Door (finished size of door is 50 mm) of size 900 mm x 2400 mm considering waterproof flush door sheet of 35 mm thickness covered both side by 6 mm commercial ply & finished with 1 mm thick laminate finished with suggested shed on both sides of shutter supported by SS -304 finish hinges. All exposed framing of 50 mm x12 mm made by teak wood bidding complete with polish. Finishing with all necessary hardwares like handles, concealed mortise lock, cylinders with 6 nos of keys, stopers, tower bolt, MS nails, Hinges, SS-304 screws, heavy duty door closer/floor spring etc. as per details given in drawing and as per instructions of Architect/Engineer In charge.	94.00	Sq.Mt	
38	FRP waterproof door for toilet area			
	Providing and fixing 30mm thick. Solid panel Waterproof FRP door shutter with all necessary fixtures and fittings etc. complete. Rates are to be inclusive of S.S hinges with necessary screws & aluminium S.S fixtures & fastenings & fastener sleeve.	42.00	Sq.Mt	
39	MS Grill for Window			
	Providing and fixing M.S. grills of required pattern to granite frames of windows etc. with M.S. flats at required spacings and frame around, square or round bars with round headed bolts and nuts or by screws (A) Ornamental Grill with necessary Applying priming coat over new steel and other metal surface after cover and including preparing the surface by thoroughly cleaning oil, grease dirt and other foreign matter and scoured with brushes fine steel wool, scrapers and sand paper with ready mixed priming paint brushing red lead. Painting two coat on new steel and other metal surface with synthetic enamel paint, brushing to give an even shade including cleaning the surface of all dirt, dust, oil, grease and other	1410.00	kg	

		INDIA		
	foreign matters.			
	Water supply and Sanitation			
	Providing and fixing water closet			
	squatting Pan (Indian type W.C. Pan) size			
	580mm (Earthwork, bed concrete, foot rest			
	and trap to be measured and paid for			
40	separately) with 100mm size P or S trap	2	Each	
	including jointing the trap with the pan and			
	soil pipe in cement Mortar 1:1 (1-Cement : 1-			
	Fine sand)(A) Vitreous China.(A) Vitreous			
	China.(I) Long pattern = White colour			
	Providing and fixing wash down water			
	closet Wall Hung type WC pan - SIZE			
	400X480X500MM and P trap distance 23.5 cms with integral P trap including jointing the			
	trap with soil pipe in cement mortar 1:1 (1			
	cement : 1 find sand) including providing and			
41	fixing of 1) Health Faucet heavy duty with	16	Each	
	SS braided hose 1.2 mt long pipe with Single			
	lever exposed part kit of Hi flow divertor			
	consisting operating lever wall flange and			
	button With pvc flush tank along with angle			
	cock etc complete. Make as per tender			
	Providing and fixing Wash Basin vitreous china oval shape Under counter(without			
	counter) wash basin size of 450 x 350 x 150			
	mm in white colour with single hole for pillar			
	tape with CP or MS brackets painted white			
	including cutting holes and making good the			
	same including (1) Providing and fixing SS			
	waste coupling of 32 mm dia size half			
	thread with 80mm height for wash basin			
42	with rubber plug (2) Providing and fixing SS	15	Fach	
42	bottle trap with internal partition of 32mm size with 250mm &190mm long wall flange	15	Each	
	connection pipes and wall flange of			
	approved quality with necessary fitting for			
	wash basin (3) Providing and fixing SS finish			
	Pillar cock quarter turn with necessary			
	fittings etc. complete (4) Providing and fixing			
	SS finish Angular Stop Cock quarter turn			
	with necessary fittings (5) Providing and			
	fixing SS finish soap dispenser with metallic			
	bottle etc. complete. Work is inclusive with			

		INDIA	1	
	providing and fixing MS Bracket support (if			
	req) with washbasin etc all complete			
	· ·			
	PLUMBING FITTINGS			
	Providing and fixing SS finish Water			
	Divertor System for all 3 toilets in each			
	quarter of Jaquar(essco), Plumber (Nector),			
43.1		3.00	Each	
	Hindware, Parryware, Johnson, Cera,			
	Simpolo make with all necessary fittings etc.			
	complete.			
	Providing and fixing SS finish Brass Bib			
	Cocks with wall flange of 15mm dia. Size			
	like Jaguar code FLR-CHR-5047N with all			
43.2	necessary fittings etc. Jaquar(essco),	50.00	Each	
	Plumber (Nector), Hindware, Parryware,	00.00		
	Johnson, Cera, Simpolo make with all			
	necessary fittings etc. complete. Providing and fixing SS finish Brass			
46.5	Angle Cock of Jaquar(essco), Plumber			
43.2	(Nector), Hindware, Parryware, Johnson,	45.00	Each	
	Cera, Simpolo make with all necessary			
	fittings etc. complete.			
	Providing and fixing SS finish Brass Head			
	Shower of Jaquar(essco), Plumber (Nector),			
43.3	Hindware, Parryware, Johnson, Cera,	12.00	Each	
70.0	Simpolo smake with all necessary fittings	12.00	Lacii	
	,			
	etc. complete.			
	Providing and fixing SS finish Brass			
	Hand Shower of Jaquar(essco), Plumber			
43.4	(Nector), Hindware, Parryware, Johnson,	18.00	Each	
	Cera, Simpolo smake with all necessary			
	fittings etc. complete.			
	Providing and fixing chromium plated			
	brass half trun Flush Cock of approved			
	quality including fixing in pipeline etc.	05.00		
44	complete. (i) 32mm dia. Jaquar(essco),	25.00	Each	
	Plumber (Nector), Hindware, Parryware,			
	Johnson, Cera, Simpolo make with all			
	necessary fittings etc. complete.			
L	, ,			

		INDIA		
45	Providing and fixing SS finish exposed part kit of concealed Brass Stop Cocks SS finish exposed part kit of concealed stop cocks KUP-CHR-35083KPM with fitting sleeve perating lever & adjustable wall flange & with REGULAR BODY OF CONCEAL STOP COCK SUITABLE Regular body of concealed stop cock for 15 mm pipe line Jaquar ALD-CHR-083 Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo make with all necessary fittings etc. complete.	12.00	Each	
46	Providing and fixing ball cock of approved. quality as directed. (B) Abonite (ii) 50mm dia.	4.00	Each	
47	Providing and fixing 750mm x 600mm bevelled edge mirror of superior glass mounted on 6mm thick A.C. sheet or plywood sheet and fixing to wooden pluge with C.P. brass screws and washers.	20.00	Each	
48	Providing and fixing S.S. 304 Kitchen sink with C.I. or M.S. brackets, painted white including cutting holes in walls and making good the same but excluding fittings. (C) Vitreous China Sink.(i) 600mm x 450mm x 150mm size complete in all respect	2.00	Each	
49	Providing and fixing C.P. brass towel rail SS finish towel ring square like Jaquar code-ACN-CHR-1121BN Jaquar(essco), Plumber (Nector), Hindware, Parryware, Johnson, Cera, Simpolo complete with C.P. brass brackets fixed to wooden plugs with C.P. brass scews.(B) 600mm x 20mm size complete in all respect	15.00	Each	
50	Providing and fixing to wall ceiling and floor PVC SWR Pipe 75 mm dia rate inclusive of neccesary beand, coupling, and fixing with a distance piece and clamp at 1meter c/c etc complete including necessary fittings viz. clamps, holders as to keep pipe 0.30 mt away from building face complete in all respect	120.00	Meter	
51	Providing and fixing to wall ceiling and floor PVC SWR Pipe 110 mm dia rate inclusive of neccesary bend, coupling, and fixing with a distance piece and clamp at 1meter c/c etc complete including necessary fittings viz. clamps, holders as to keep pipe 0.30 mt away from building face complete in all respect	120.00	Meter	
52	Providing and fixing CP Brass shower rose with 15 mm or 20 mm inlet. (A) 100 mm dia. Each.	8.00	Each	
53	Providing and fixing in tranches and floor PVC SWR Pipe 160mm dia rate inclusive of neccesary band, coupling, and excavation and trench filling etc complete.	250.00	Meter	

		INDIA		
54	Providing and fixing PVC SWR Nahni trap IS 14735 for drain - 75 mm diameter with jali of the following nominal diameter of self-cleansing design with C.I scread down or hinged grating including the cost of cutting and making good the walls complete in all respect	30.00	Each	
55	Providing laying and jointing in true line and level U.P.V.C. / C.P.V.C. Pipe (SCH- 40) for cold & hot water including fittings make PRINCE / SUPREME / ASTRAL / FINOLEX as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all material complete in all respect			
Α	15MM DIA	294.00	Meter	
В	25MM DIA	294.00	Meter	
С	32MMDIA	250.00	Meter	
D	40MMDIA	200.00	Meter	
Е	50MM DIA	200.00	Meter	
56	Providing laying (to level or slopes) and jointing reinforced concrete Light duty non-pressure pipes I.S. class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete in all respect. (D) 300mm (upto 10 ton)	300.00	Meter	
57	Providing and fixing S.W. gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300mm size (inside) with standard weight. (i) Square mouth traps.(B) 150mm x 100mm size P or R type	5.00	Each	
58	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with bricks having crushing strength not less than 35Kg/Cm2 in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm internal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg.) (R.C.C. top slab with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete in all respect. (i) Inside dimensions and 450mm deep for pipeline with one or two inlets.			
Α	inside dimension 455 mm x 610mm and 450 mm deep for single pipeline	8.00	Each	

	T	INDIA		
В	inside dimension 500 mm x 700 mm and 450 mm deep for one or two inlet pipeline	4.00	Each	
С	inside dimension 600 mm x 850 mm and 450 mm deep for three or more inlet pipeline	2.00	Each	
59	Providing erecting and fixing triple coated Syntex PVC. (ISI) water tank of required capacity each with all necessary fittings and connection etc. complete on terrace. 2 NO. OF 5000 LTR WATER TANK = (2 X 5000)+ (1 x 3000) = 15,000 LTR	7000	Each	
	Painting.			
60	Applying two or more coats of Birla (white cement based) or Asian (acrylic lapy- putty) & two or more coats coats of primer of approved brand and manufacture on new wall surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth including Wall painting (two or more coats) with apex ultima paint of approved brand and manufacture on undecorated wall surface to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth.	3165.00	Sq.mt	
61	Finishing wall with weatherproof exterior apex ultima on wall surface (three coats) Low VOC paints to give an required shape even shade after thoroughly brushing the surface to remove all dirt, and remains of loose powdered materials. Rate inclusive of primer coat etc complete and ten years warranty.	1465.00	Sq.mt	
62	Applying two or more coats of Birla (white cement based) or Asian (acrylic lapy- putty) & two or more coats of primer of approved brand and manufacture on new wall surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth including Ceiling painting (two coats) with apex ultima paint of approved brand and manufacture on wall surfaces to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth Ceiling and ten years warranty.	1113.75	Sq.mt	
63	Wall painting (three coats) with oil paint of approved brand and manufacture on undecorated wall surface to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth.	650.00	Sq.mt	

	Painting two coats (excluding priming coat)	INDIA					
64	on new steel and other metal surface with enamel paint, brushing, interior to give an even shade including cleaning the surface an even shade including cleaning the surface of all dirt, dust and other foreign matter etc. complete as directed by Engineer In charge.	750.00	Sq.mt				
65	Providing and fixing in position collapsible steel shutters with vertical channel 20 x 10x 2 mm braced with flat iron diagonals 20 x 5 mm size with top and bottom rails of T_rin 40 x 40 x 6 mm with 38 mm Dia, steel pulleys complete with bolts, nuts, locking arrangements, stoppers, handles including applying priming coat with two coats of enamel paints. (6 no. x 1.8mt x 2.1mtr)	25.00	Sq.mt				
66	Providing and fixing MS Pipe, pipe railing / hand rail as per detailed drawing including 3 coats of painting to steel works complete.	36.00	Rmt				
67	STONE CLADDING / EXPOSED BRICK - EXTERNAL SIDE - After cleaning of surface applying bonding coat of Perma SBR Providing & fixing 18 mm thick stone approved by Client/Architect in necessary chemical including cutting, fixing in paste with hair line joint, filling the joints with pigments / joint filler, rounding of edges, edge & finishing as per instruction of authority i.e. Architect/Bank etc. (Photograph must be submit while execute this item on site.)	150.00	Sq.mt				
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	Amount (Rs.)						
	Applicable GST (Rs.)						
	Total Amount (Rs.)						

	BILL OF QUANTITY FOR UNDERGROUN	D WATER	TANK OF	BSVS AT AHWA,	DIST. DANG
Ite m no.	Particulars	Qty	Unit	Rate	Amount
	Following mentioned items are to be provi complete as directed by Architect/Bank wi				and tackles and
	Excavation	mout add	itional cos	t etc.	
1	Excavation for foundation upto 1.5 Mt Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead.(B) Loose or Soft Soil	18.00	Cu.Mt		
2	Excavation for foundation 1.5 to 3.0 Mt Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead.(B) Dense or hard soil	12.00	Cu.Mt		
3	Filling Excavated Earth in Trenches				
	Filling available excavated earth (excluding rock) in Trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth consolidating each deposited layer by ramming and watering)	17.50	Cu.Mt		
	Plain Concrete work				
	Flam Concrete work				
4	Providing and laying Cement Concrete (PCC) 1:3:6 (1Cement : 3coarse sand : 6crushed stone aggregates 40m mm nominal size) and curing complete including cost of form work in Foundation and plinth.	1.80	Cu.Mt		
	R.C.C. WORKS - M25 incl. Form work				
	Providing and laying exposed controlled cement concrete M.25 with smooth finishing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in Column, wall, Slabs, landing, shelves, Balconies, Lintels, Beams, Girders and Cantilever upto floor two level. (more than 10 ton)				
5	Columns, Pillars upto floor two level	1.00	Cu.Mt		
6	Slabs, landing, balconies up to floor two level	1.50	Cu.Mt		
7	Walls up to floor two level	4.00	Cu.Mt		
8	Beams up to floor two level	2.50	Cu.Mt		
9	Reinforcement				

1	ı	INDIA	ı	1	
	Providing TMT Bar FE 500/500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level (upto 10 ton)	1200.00	Kg		
10	Waterproof cement plaster				
	Providing 15 mm thick cement plaster in single coat on brick/concrete wall for interior plastering finished even and smooth in cement mortar 1:3 (1 cement: 3 sand) including curing etc. complete including finishing with a floating coat of neat cement slurry. Extra over item for providing and mixing approved water proofing material in cement mortar in proportion recommended of cement by the manufactures.	30.00	SqMt.		
11	Water proofing treatment on exterior wall				
	Providing and laying water proofing treatment for external side of basement/underground tank wall as following steps: (1) Cleaning the surface. Thorough surface preparation of slab so that no dust, dirt etc. should remain on the surface. (2) Wherever possible cracks has to be sealed using a Free flowing non shrink high strength Grout + High strength repair mortar and bonding agent. (3) Filling the cold joints with a Free flowing non shrink high strength Grout + High strength repair mortar and bonding agent. (4) Doing polymer using High strength repair mortar and bonding agent. cement and sand wherever patchwork for honeycomb repairs has to be done (5) Apply 2 coats of crystalline based water proofing system on slab in bucket type pattern on prewetted surface and then applying screeding of cement and sand. (6) Providing and laying 15 mm th. cement plaster on wall in cement mortar 1:3 (1 cement: 3 sand) including curing etc. complete	40.00	Sq.Mt.		
12	Floor Tiles				
	Providing & laying white glazed tiles 6 mm thick in flooring laid on a bed of 12 mm thick C.M. 1:3 (1 Cement : 3 Coarse sand) and finished with flush pointing in white cement.	6.00	Sq.Mt.		
13	Wall Tiles				

		INDIA		
	Providing & laying white glazed tiles 6 mm thick in skirting, riser and dedo on 10 mm thick C.M. 1:3 (1 Cement : 3 Coarse sand) and finished with flush pointing in white cement	30.00	Sq.Mt	
14	Manhole Cover			
	Supplying and fixing CI cover 750 mm x 750 mm with frame for Underground water tank as per standard pattern the weight of cover to be not less than 35 Kg.	1.00	Each	
15	Footsteps			
	Providing and fixing cast iron steps of size 500 mm x 150 mm x 22.5 mm and painting with two coats of anti-corrosive paint etc. Complete	6.00	Each	
16	Ball Valve			
	Providing and fixing ball cock of approved quality as directed. Copper Metal - 50mm dia	1.00	Each	
17	Supplying and installing submersible pumping set 5.0 HP manufactured as per IS standard including non-return valve sluice valve flexible cable (as required 70 mt length) voltmeter, panel board, capacitor, starter, switch, pressure gauge with accessories of approved manufacture tools of 50 hours power capacity. One standby pump with alternative startup mode. (Make: Kirloskar/Lubi)	2.00	No.	
18	Providing and fixing check or non-return pully wheel valve of 50 mm diameter	2.00	No.	
		`		
	Amount (Rs	•		
	Applicable GST	(Rs.)		
	Total Amount ((Rs.)		

	BILL OF QUANTITY FOR BORI	WELL OF	BSVS AT	AHWA, DIST. DAN	<u>G</u>
Item no.	Particulars	Qty	Unit	Rate	Amount
1	Drilling in soil with lowering of pipes concrete sealing including gravel packing clay breaking and development of bore with air compressor by required capacity vertical test etc. complete including the cost of benimeter 250mm dia.	100.00	Rmt.		
2	Supplying slotted PVC pipes of approved quality at site of work confirming to IS. 1239/1974 180mm dia.	40.00	Rmt.		
3	Supplying PVC plain pipes of approved quality at site of work confirming to IS. 1239/1974 180mm dia.	60.00	Rmt.		
4	Providing and jointing flat flexible coppered cable PVC insulated enamelled approved make three core 2.50mm.	200.00	Rmt.		
5	Supplying and installing 10.00 H.P. single or three phase eight stage 2900 RPM submersible pump set suitable for boring 180 mm dia. bore having discharge capacity of 250-278 liter per minute against the total hard between 100 etc. including necessary stage AMP motor voltmeter ground capacity preventative push button operated fully automatic starter over a polished wooden board and the pump set connected to starter and main switches with PVC insulated flexible three core copper cable of required length complete wiring set of 10.00 H.P. as directed.	2.00	No.		
6	Providing and fixing to wall ceiling and floor HDP pipes tubes (medium grade) of the 50mm nominal bore, tube, fittings and clamps include. Making good the wall ceiling and floor. (F) 50mm dia.	100.00	Rmt.		
7	Providing and fixing to concealed wall ceiling and floor galvanized mild floor tubes (medium grade) of the 50mm nominal bore, tube, fittings and clamps include. Making good the wall ceiling and floor (F) 40mm dia	100.00	Rmt.		
8	Providing and fixing to concealed wall ceiling and floor galvanized mild floor tubes (medium grade) of the 25mm nominal bore, tube, fittings and clamps incldg. Making good the wall ceiling and floor.(C) 25mm dia.	70.00	Rmt.		

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA

9	Providing and fixing gun metal cock of non-return full way wheel valve.(F) 50mm dia		No.		
	Amount (R	s.)			
	Applicable GS	T (Rs.)			
Total Amount (Rs.)					

BILL OF QUANTITY FOR COMPOUND WALL OF BSVS AT AHWA, DIST. DANG

Bidders have to carried out Topographical Survey before execution of work & before handing over of work, both reports, drawings etc. submit to Bank/Architect. Surveyor shall be licensed and Temporary Benchmark (TBM) to be setup in presence of Bank/Architect before commencing of work.

ltem no.	Particulars	Qty	Unit	Rate	Amount			
	Following mentioned items are to be providing and fixing with necessary tools and tackles and complete as directed by EIC/Architect without additional cost etc.							
1	Excavation for foundation upto 1.5 mt. depth incl. soring out & stacking of useful materials and disposing of excavated stuff upto 50 mt. Lead. (For Ground Beamns)	202.36	CMT.					
2	Excavation for foundation 1.5 to 3.0 Mt Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead.(B) Dense or hard soil	70.85	СМТ.					
3	Providing and laying Cement Concrete (PCC) 1:3:6 (1Cement : 3coarse sand : 6crushed stone aggregates 40m mm nominal size) and curing complete including cost of form work in Foundation and plinth.	20.53	СМТ.					
4	Filling available excavated earth (excluding rock) in Trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth consolidating each deposited layer by ramming and watering).	204.15	СМТ.					
5	Providing and laying controlled cement concrete M.25 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete. (more than 10 ton)	39.85	СМТ.					
6	Providing and laying controlled cement concrete M.25 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (C) Slabs, landing, shelves, Balconies, Lintels, Beams, Girders and Cantilever upto floor two level. (more than 10 ton)	33.14	CMT.					
7	Providing and laying controlled cement concrete M.25 and curing complete including the cost of formwork and	19.52	CMT.					

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	excluding reinforcement for reinforced						
	concrete work in (D) Columns, Pillars						
	posts and struts, upto floor two level. (more than 10 ton)						
	Providing TMT Bar FE 500/500D						
	reinforcement for R.C.C. work including	10514.8					
8	bending, binding and placing in position	5	Kg.				
	complete upto floor two level (upto 10 ton)						
	Brick work using common Brunt clay						
	building bricks having crushing strength						
9	not less than 35 Kg./Sqcm. in cement	88.45	CMT				
	mortar 1:5 (1cement: 5 fine sand)						
	CONVENTIONAL						
	Providing 20 mm thick double coat mala						
	cement plaster on interior brick / concrete						
	work for plastering comprising of base						
10	coat of 12 mm thick cement plaster in cement mortar (1 Cement: 4 coarse sand)	990.00	SMT.				
'0	in rough finishing and 8 mm thick top coat	330.00	OIVIT.				
	of cement mortar 1:2 (1 Cement: 2						
	Coarse sand) finished with trovel including						
	scaffolding curing etc. complete.						
	Finishing wall with weather proof exterior						
	emulsion apex ultima paint ICI/Asian Paint						
	whether shed ace on wall surface (two						
44	coats) Low VOC paints to give an	4400 50	OME				
11	required shape even shade after	1138.50	SMT.				
	thoroughly brushing the surface to remove all dirt, and remains of loose powdered						
	materials. Rate inclusive of primer coat						
	etc complete and <u>ten years warranty.</u>						
	Providing and fixing concertina coil						
	fencing with punched tape concertina coil						
	600 mm dia 10 metre openable length (
	total length 90 m), having 50 nos rounds						
	per 6 metre length, upto 3 m height of wall						
	with existing angle iron 'Y' shaped placed						
	2.4 m or 3.00 m apart and with 9						
10	horizontal R.B.T. reinforced barbed wire,	050.00	DMT				
12	stud tied with G.I. staples and G.I. clips to	250.00	RMT				
	retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron,						
	all complete as per direction of Engineer-						
	in-charge, with reinforced barbed						
	tape(R.B.T.) / Spring core (2.5mm thick)						
	wire of high tensile strength of 165 kg/						
	sq.mm with tape (0.52 mm thick) and						
	weight 43.478 gm/ metre						
13	Weep Hole	164.00	No				
	Amount (Rs	5.)					
	Applicable GST	(Rs.)					
	Total Amount (Rs.)						

	BILL OF QUANTITY FOR INFRASTRUCTURE WORKS OF BSVS AT AHWA, DIST. DANG						
Item no.	Particulars	Qty	Unit	Rate	Amount		
	Bidders have to carried out Topographical both reports, drawings etc. submit to Benchmark (TBM) to be setup in presen work.	Bank/Archite	ct. Survey	or shall be lice	ensed and Temporary		
	Following mentioned items are to be provided as directed by EIC/Architect without addition		with nece	essary tools and t	ackles and complete		
1	Clearing and grubbing plot area including uprooting rank vegetation, grass bushes, shrubs, saplings and trees girth up to 300mm removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable materials to be use of auctioned upto a lead of 1000m. including removal and disposal of top organic soil not exceeding 150 mm in thickness	3600.00	Sq.mt				
2	Providing and fixing yellow soil for filling the plot for raise the level of plot according to existing road level including compacting with power roller, watering and proper levelling.	1500.00	Cumt				
3	Paver Block Flooring in Compound area.						
А	Providing and laying Cement Concrete (PCC) 1:3:6 (1Cement : 3coarse sand : 6crushed stone aggregates 40m mm nominal size) and curing complete including cost of form work for ground level.(Paver block)	142.00	Cu.mt				
В	Providing and fixing precast rubber dye interlocking concrete block 60mm thick with grade of concrete M-250 pneumatic compressed by mechanically pressed and as per approved designs, colours and shapes as directed. including 75 mm thick sand layer for levelling and filling the joint with sand in proper line and level etc. complete. for ground floor.	400.00	Sqmt				
С	Providing and fixing pre-cast concrete kerb stone of grey cement based concrete block 30cm length,30cm height and 15cm thick of M25 grade concrete as per approved design and including excavation for fixing in proper line and level, filling the joint with C:M 1:3	100.00	R.mt				

i		INDIA	1	ı	
	(1cement:3fine sand) etc complete. (upto				
	10 ton)				
	Plantation (Peripheral) -Plantation of tree				
	in soil includes digging 45 x 45 x 45 cm				
	size pits Preparing Providing and mixing				
	organic fertiliser Watering Planting and				
	filing the pits as per direction including				
	Providing tree plants having minimum				
	1.50 mt height and healthy growth of				
	various kinds as like Platform BOTTLE				
	TEREE, NARIYALI and as suggested with Maintenance of Planted tree upto				
D	Three year includes watering digging	50.00	NOS.		
	pilts rimming applying fertilizer,				
	insecticide, Pesticide and Pesticides and				
	replacing plants if necessary etc.				
	complete for raising of plants weeding or				
	soil working also includes maintaining				
	water supply lines and drip lines of				
	plantation (Water and Electricity supply by Dept.) selection will be approved by				
	Engineer in charge and architect.				
4	Main Gate Ramp				
A	B.B.C.C. WORK				
	Pro.& laying cement concrete 1:5:10 (1-				
	cement: 5 - fine sand: 10- graded brick				
	bat aggregates 40mm nominal size) and	1.80	Cu.Mt		
	curing complete excluding cost of				
	formwork in Plinth (BBCC)				
	Providing and laying Cement Concrete				
	(PCC) 1:3:6 (1Cement : 3coarse sand :				
В	6crushed stone aggregates 40m mm nominal size) and curing complete	3.60	Cu.mt		
	including cost of form work for ground				
	level.(Paver block)				
4	Rainwater Harvesting				
_	Drilling 12 " dia. Borehole up to 100'	400	DET		
Α	depth near to regular use water bore.	100	RFT.		
	Providing & fixing 12 " dia. PVC				
В	perorated pipe up to 80' depth with	80	RFT.		
	caping on top.				
	Constructing Bk. Chamber of size 5' X 5'				
С	& 6 ' deep with 9 " bk wall all around pebbles of mix size up to 3 ' depth. At	Lump			
	around bore pipe. (Main	sump			
	Chamber)				
	Providing & laying precast RCC cover				
D	with holes on top in 3 pieces.	3	NOS.		
	(Cover on Main Chamber)				
	Providing & laying 12' dia NP3 precast				
E	RCC pipe in plot as per layout including	600	RFT.		
	excavation, laying of pipes in slope &				
	fixing collars.				

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA

F	Constructing bk. Chambers of size 3' x 3' & ave. 2'-6" depth with 9" bk wall & plastering from inside with precast covers.	4	NOS.			
	Amount (Rs.)					
	Applicable GST (Rs.)					
	Total Amount (Rs.)					

BILL OF QUANTITY FOR SEPTIC TANK CONSTRUCTION OF BSVS AT AHWA, DIST. DANG						
Item no.	Particulars	Qty	Unit	Rate	Amount	
1	EXCAVATION					
	Excavation for foundation upto 1.5 Mt Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead.(B) Loose or Soft Soil	96.47	Cu mt.			
2	Excavation for foundation 1.5 to 3.0 Mt Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead.(B) Dense or hard soil	96.47	Cu mt.			
3	Rubble Filling					
	Providing and laying 230 mm thick rubble soling including spreading the stone aggregates for soiling and WBM including filling the intersices forming the surface to required camber and gradient. and spreading murrum or sand blindage or road crushed filling the gaps in metal leveling to camber and gradient as directed.	38.59	Cu mt.			
4	P.C.C.					
•	Providing and laying Cement Concrete (PCC) 1:3:6 (1Cement : 3coarse sand : 6crushed stone aggregates 40m mm nominal size) and curing complete including cost of form work in Foundation and plinth.	9.65	Cu mt.			
5	R.C.C. WORKS - M200					
	Providing and laying controlled cement concrete M.25 and curing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (C) Slabs, landing, shelves, Balconies, Lintels, Beams, Girders and Cantilever upto floor two level. (more than 10 ton)					
	Slab	9.00	Cu mt.			
	Pardi (bafele wall)	3.63	Cu mt.			
	Beam	3.11	Cu mt.			
6	Reinforcement					
	Providing TMT Bar FE 500/500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level (upto 10 ton)	1,890.00	Kg			
7	bending, binding and placing in position complete upto floor two level (upto 10	1,890.00	Kg			

	INDIA					
Brick work using common Brunt clay building bricks having crushing strength not less than 35 Kg./Sqcm. in cement mortar 1:5 (1cement: 5 fine sand) CONVENTIONAL	27.93	Cu mt.				
8 Internal Plaster on Walls						
Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or half brick walls for interior plastering upto floor two level and finished even and smooth in (iii) Cement mortar 1:6 (1-cement:6-sand) FINISHING with floating coat of neat cement SLURRY.	90.00	Sq mt.				
9 Waterproof cement plaster						
Providing 15 mm thick cement plaster in single coat on brick/concrete wall for interior plastering finished even and 1:4 cement sand mortar admixed with an integral water proofing compound like perma plast o proof proportionately .(IGBC-Green Crtified like, perma, pidilite, sika) the surface plaster shall be provided with a drip/ groove by pressing in a pipe when the plaster is wet at the centre of surface. these all are including, providing and removing double scaffolding, curing, etc. complete including finishing with a floating coat of neat cement slurry Rates complete with all lead & lift as directed by Engineer Incharge.	105.00	Sq mt.				
10 Manhole (1.20 x 1.20)						
Supplying and fixing CI cover 600 mm x 450 mm with frame for Underground water tank as per standard pattern the weight of cover to be not less than 35 Kg.	3.00	Nos.				
Amount (F	Rs.)					
Applicable GS	ST (Rs.)					
Total Amount (Rs.)						

	BILL OF QUANTITY FOR SOAK PIT CONSTRUCTION OF BSVS AT AHWA, DIST. DANG						
Item no.	Particulars	Qty	Unit	Rate	Amount		
	EXCAVATION						
1	Excavation for foundation upto 1.5 Mt Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead.(B) Loose or Soft Soil	31.74	Cu mt.				
2	Excavation for foundation 1.5 to 3.0 Mt Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead.(B) Dense or hard soil	31.74	Cu mt.				
3	Excavation for foundation up to 3.0 mt to 5.0 mt Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead	42.32	Cu mt.				
4	Excavation for foundation up to 5.0 mt to above Depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead	21.16	Cu mt.				
5	Filling in Foundation and Plinth with Brick Batts or selected Soil in layers of 20 cm Thickness including Watering, Ramming and Consolidating etc. Complete.	5.50	Cu mt.				
	P.C.C.						
6	Providing and laying Cement Concrete (PCC) 1:3:6 (1Cement : 3coarse sand : 6crushed stone aggregates 40m mm nominal size) and curing complete including cost of form work in Foundation and plinth.	0.60	Cu mt.				
	R.C.C. WORKS - M200						
7	Providing and laying exposed controlled cement concrete M.25 with smooth finishing complete including the cost of formwork and excluding reinforcement for reinforced concrete work in (C) Slabs, landing, shelves, Balconies, Lintels, Beams, Girders and Cantilever upto floor two level. (more than 10 ton)						
	Slab	1.57	Cu mt.				

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA

	Beam	4.50	Cu mt.	
8	Reinforcement			
	Providing TMT Bar FE 500/500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level (upto 10 ton)	0.94	МТ	
9	BRICK WORK 9 "			
	Brick work using common burnt clay building brick having crushing strength not less than 35 Kg/ Sq.cm. in Cement mortar 1: 6 (1 Cement: 6 Fine sand) (B) Conventional	15.90	Cu mt.	
	Amount (R	s.)		
	Applicable GS			
	Total Amount	(Rs.)		

	BILL OF QUANTITY FOR FIRE PROTECTION SYSTEM OF BSVS AT AHWA, DIST. DANG						
Item no.	Particulars	Qty	Unit	Rate	Amount		
Α	FIRE HYDRANT SYSTEM AND PIPING						
1	Supply. installation, testing & commissioning of ISI approved Horizontal Split-Case type electrical motor driven main fire pump set having 137 m³/hr. @ 70 m head. Kirloskar make, Horizontal end suction, back pullout, top discharge centrifugal pump with gland packed, with all standard accessories base frame, coupling & coupling guard and foundation bolts. The pump unit shall be a horizontal direct mounted motor. Motor speed shall be 3000 rpm. Unit shall comprise the following minimum requirements: a) Pump, b) Electric motor IE 2 type, c) Foundation bolts, d) Air release valve, e) Mating flanges with gasket and fasteners, f) Discharge gauges, etc. complete in all respect. Model DB 80/26. R Motor 45 KW/60 H.P. / 2900 rpm. with labour, with GST.	1	No.				
2	Supply. installation, testing & commissioning of ISI approved Vertical In-line type electrical motor driven jockey pump set having 10.8 m³/hr. @ 70m head. Kirloskar make. The pump unit shall be a vertically direct mounted motor. Unit shall comprise the following minimum requirements: a) Pump, b) Electric motor IE2, c) Foundation bolts, d) Mating flanges with gasket and fasteners, e) Discharge gauges, etc. complete in all respect, with labour, with GST.	1	No.				
3 a	Supply, Installing, Testing and Commissioning of Normax make C.I. Heavy duty foot valve with flangs, Nut bolts, Gaskets etc. with necessary complete accessories. 150 mm	1	No.				
4	Providing and erecting XLPE (IS:7098) (I)88 ISI marked armoured cable multistrand Aluminium conductor for 1.1 KV to be laid with necessary clamps or in existing cable trench / trays from Fire panel to the motors.	100	No.				

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5	Supply, installation, testing & commissioning of Priming tank, HDPE type, min. 1000 litres, necessary piping for priming the pumps of 100 mm size, butterfly valves for isolation, NRV 100 mm to prevent back flow, Water Filling piping min. 50 mm size, to priming tank, with all complete.	1	No	
6	Supply, installation, testing & commissioning of Manifold (surge vessel,) for fire hydrant system, min. 300 mm diameter, made from M.S plate, hydro tested to 15 kg./cm2. with ball valves, header with couplings for fitting pressure switches, pressure gauges etc. With necessary isolation valves with all complete.	1	set	
7	Supply, installation, testing & commissioning of instrumentation for automatic operation of all pump sets including 3 nos. pressure switches and 3 nos. 150 mm dia. dial Burdon Type Glycerine Filled pressure gauges with SS syphon & isolation ball valve arrangements with necessary isolation valves with all complete.	1	Job	
8	Supply, fabrication & erection of aboveground G.I. ERW piping, conforming to IS:1239, part-I, Heavy class (C class) up to 150 mm dia. and IS:3589, for size 200 mm dia. & above, thickness. G.I. pipe fittings as per IS: 1239, part-II, Heavy class(C class) for size 150 mm dia. & below & IS: 3589, min. 6.35 mm, for size 200 mm dia. above, flanges, nuts bolts & washers, 3 mm thick gasket, pipe hangers, etc. Hydrostatic testing for 2 hour's at 150% of the system pressure, hookup etc. Painting for piping, fittings & structural pipe support, shall be two coat of zinc primer and two coats of fire red conf. to IS: 5, Shade 536. Complete with all accessories as per approved drawings, specicification and direction of the Engineer-in-Charge, with all complete.			
а	100 mm dia.	50	Mtr.	
b	80 mm dia.	50	Mtr.	
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С	50 mm dia.	70	Mtr.		
d	25 mm dia.	70	Mtr.		
9	Supply, installation, testing & commissioning of <u>Underground GI</u> (ERW) piping conforming to IS:1239, part-I, Heavy class(C class) up to 150 mm dia. and IS:3589 Heavy class(C- class), for 200 mm dia. & above, min. 6.35mm thickness including Medium class fittings, <u>anticorrosive tape</u> of size 150 mm wide x 4 mm thick, <u>wrapping & coating</u> with 13KV holiday testing. Rates shall include sand bedding of 75mm dia all around, backfilling of the excavated including installation of heavy pipe fittings, flanges, etc. 10 % of all the welded joints shall be done <u>radiographically</u> tested and 50% of the joints radiographed shall be the "Field Joints". Hydrostatic testing for 2 hours at 150% of the system pressure, hookup etc., complete with all accessories as per approved drawings, specifications and direction of the				
	Engineer-in-Charge, with all complete. (Road Crossing)				
а	150 mm dia.	100	Mtr		
u	Too min did.	100	10161		
10	Supply, installation, testing & commissioning of Cast iron body double flanged gate valve conf. to IS: 14846, PN-1.6 with mating flanges, drilling as per IS/ANSI 150# with mating flanges, galvanized nut, bolts & washers, gasket 3 mm thick, etc., with all complete.				
а	150 mm dia.	1	No.		
b	100 mm dia.	1	No.		
		-			
11	Supply, Installation, Testing & Commissioning of Cast iron body Butterfly valve according to IS: 13095, PN-1.6, ISI mark, below Lever operated and above 150 mm dia. Gear operated complete with mating flanges /ANSI class # 150 with bolts & nuts washers, rubber gaskets 3 mm thick, etc., with all				
	complete.				
а	complete. 150 mm dia.	2	No.		
a b		2	No.		

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12	Supply, installation, testing & commissioning of Cast iron body NRV conf. to IS: 5312, PN-1.6, Dual Plate type with S.S flap, IS mark, complete with mating Flanges/IS/ANSI class # 150 with bolts & nuts, washers, gaskets 3 mm thick, etc., with all complete.				
а	150 mm dia.	1	No.		
b	100 mm dia.	1	No.		
		-			
13	Supply & installation, testing & commissioning of Fire Fighting Hose - conf. to IS: 636, type - A, ISI, The fire hose shall be 15 m long with 63 mm dia. stainless steel (SS 304) couplings conf. to IS: 903, at both the ends for connection with the hydrant valve and the branch pipe.	2	No.		
14	Supply, Installation, testing & commissioning of Swinging type mild steel hose reel drum with 20 mm dia. x 30 mtr. rubber hose as per IS: 884. The mounting stand shall be of mild steel and the hose shall be fitted with a SS shut-off nozzle & SS ball valve of 25 mm dia. including supporting arrangement with all complete.	2	No.		
15	Supply & Installation, Testing & Commissioning of 25 mm dia gun metal <u>Air Release valve</u> with 25 mm dia stainless steel ball valve.	1	No.		
16	Provide complete demonstration of whole fire system for three years and obtaining fire NOC from SMC/ Nagar palika for three years as per Govt. rules & Regulations. Fees for SMC/ Nagar palika for Fire NOC will be paid by department and other services included in this item except Annual maintenance contract.	1	Job		
17	Design , Supply and installation of Safety signage made of Zinc Sulphide based glow in dark , Rigid sheet with High Luminous property enclosed in a transparent weather proof UV stabilized plastic pasted on 3 mm thick clear acrylic sheet such as EXITS, EMERGENCY EXIT, DO NOT USE LIFT DURING FIRE, FLOOR MARKINGS, FIRE LIFT, STAIRCASE EXIT, FIRE ALARM CALL POINT, FIRE HOSE REEL, FIRE HYDRANT POINT etc.	10	sq.m		

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18	Supply, Installation, Testing & Commissioning of Standard Response Sprinkler, Pendent Brass Sprinkler , Quartzoid Bulb type with crome finish, nickel crome platde, K factor K-80 , Temp 68 °C, 1/2 " end connection including recessed escutcheon. (UL Listed).	80	No.		
19	Supplying of 25 mm dia UL Listed SS braided Sprinkler Flexible Hose of having 15mm end connection outlet with supporting arrangement from false ceiling frame and having max. test pressure of 60 bar and max. working pressure of 12 bar at 149 degree .c. maximum temperature. (UL Listed)	80	No.		
	-				
В	FIRE EXTINGUISHERS				
20	Supply, Installation and commissioning of ABC type fire extinguisher, capacity 5 kg. as per IS 14609 / 15683. With necessary fittings.	5	No.		
21	Supply, Installation and commissioning of CO2 type fire extinguisher, capacity 4.5 kg. as per IS 15222/15683. With necessary fittings.	5	No		
	Amount (R				
	Applicable GS				
	Total Amount	(Rs.)			

	BILL OF QUANTITY FOR ELECTRI	CAL WORKS	FOR BSV	S AT AHWA, DIS	T. DANG
ltem no.	Particulars	Qty	Unit	Rate	Amount
1	Point wiring for Light / Bell with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in/ on surface on wall/ceiling complete with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic box, single mounting base frame covered with textured/metallic front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed.(a) with medium class Rigid PVC pipe and accessories Cat II	243	Pt.		
2	Point wiring for secondary light point with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in / flushed on wall/ceiling, complete with earth continuity and necessary connection with primary light with accessories erected on Metal / PVC box covered with 3 mm thick PC (Polycarbonate) / Acrylic sheet for open / concealed wiring. with necessary Lamp holder / ceiling rose / H.D. Connector as directed.(a) with medium class Rigid PVC pipe and accessories(a) with medium class Rigid PVC pipe and accessories Cat III	80	Pt.		
3	Point wiring for FAN with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in / flushed on wall/ceiling complete with 6A Modular type switch and hum free EME four or more step type electronic fan regulator with separately mounted and accessories with earth continuity of following type erected on PVC / Metallic box, single mounting base frame covered with	43	Pt.		

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	textured/metallic front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling				
	rose / H.D. Connector as directed.(a) with medium class Rigid PVC				
4	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of to be erected concealed in / on surface of wall / ceiling complete with Modular type switch & 5 pin Plug erected on PVC / Metallic box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories.[I] For 6A Plug with 2-1.5 sq.mm Cu. Wire, (a) with medium class Rigid PVC pipe and accessories, Cat. III	10	Pt.		
5	[II] For 16A Plug with 2-4 sq.mm Cu. Wire	36	Pt.		
6	Point wiring for Looped Plug with 6A Modular type switch & 5 pin socket erected on PVC / Metallic box, single mounting base frame covered with textured / metallic front plate modules erected on / in wall / ceiling with following type	113	Pt.		
7	Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate, modules erected with necessary connection. As desired by Engineer In charge3) Two Pin/ RJ-11 Telephone Socket, [B] For Two Gang, Cat.III	8	Nos.		
8	(4) TV Co-axial Socket outlet, Cat.III	3	Nos.		
9	(8) Modem Jack for Computer Open RJ-45, Cat.III	25	Nos.		
10	(9) 16 Amp. SP one way switch, Cat.III	10	Nos.		
11	(10) 6/16Amp. Universal socket, Cat.III	10	Nos.		
12	(14) 32A Double Pole Modular MCB Switch, Cat.III	6	Nos.		
13	Providing and erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size (a) with medium class Rigid PVC pipe	300	Mtr.		

		INDIA		
	and			
	Providing and erecting Mains with 1.1			
	KV grade FRLS PVC insulated ISI			
	marked stranded Copper conductor			
	wire in following type of pipe to be			
1 44	erected concealed in /flushed on	0000	N 44	
14	wall/ceiling, with 1.5 sq. mm copper	2260	Mtr.	
	conductor FRLS PVC insulated			
	stranded wire of green colour for			
	earth continuity of following size (a)			
	with medium class Rigid PVC pipe			
	and			
	Providing and erecting Mains with 1.1			
	KV grade FRLS PVC insulated ISI			
	marked stranded Copper conductor			
	wire in following type of pipe to be			
	erected in / on wall / ceiling with 2.5			
15	sq. mm copper conductor FRLS PVC	360	Mtr.	
	insulated stranded wire of green			
	colour for earth continuity of following			
	size(a) with			
	medium class Rigid PVC pipe and			
	accessories(a) 2 wire 4 sq.			
	Providing and erecting Mains with 1.1			
	KV grade FRLS PVC insulated ISI			
	marked stranded Copper conductor			
	wire in following type of pipe to be			
10	erected in / on wall / ceiling with 2.5	00	N 41 .	
16	sq. mm copper conductor FRLS PVC	60	Mtr.	
	insulated stranded wire of green			
	colour for earth continuity of following			
	size(a) with medium class Rigid PVC			
	pipe and accessories (h) 4 wire 6 sq.			
17	Supplying & erecting approved make	200	Mtr.	
	LAN cable of following	====		
	size in existing pipe as per			
	direction[A] CAT - 5			
18	Supplying & erecting approved make	825	Mtr.	
	LAN cable of following	020	IVILI.	
	size in existing pipe as per direction.			
	C CAT - 6			
	Providing and erecting ISI mark			
	medium class RIGID PVC PIPES of			
	following size complete to be erected			
10	on/in wall or ceiling erected with	880	N /1+	
19	necessary PVC fittings & Junction boxes fixed with adhesive solution &	000	Mtr.	
	Clamps with following dia of pipes, in			
	approved manner as directed (b) 25			
20	mm	2	NIs -	
20	Providing and erecting Decorative	3	Nos.	
	call bell Ting-tong box type			
	250 volts complete erected			

		INDIA		
21	Providing & erecting PVC Corrugated Flexible Conduit with required nos. of coupling, PVC bushes, Check- nuts etc. complete of following sizes.(2) 25 mm	50	Rmt	
22	Supplying and laying UPVC cable trunking system comprising unplasticized polyvinyl, chloride rigid material with ignition free & flame proof confirming BS .All necessary accessories and measuring of following sizes.100 mm x 50 mm trunking	50	Mtr.	
23	Providing and erecting Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts	30	Mtr.	
24	(b) One wire 10.00 sq. mm.	30	Mtr.	
25	(c) One wire 25.00 sq. mm.	30	Mtr.	
26	Supplying and erecting Flexible PVC insulated multistrand multicore 1.1 kv grade ISI marked copper wires of following size to be erected as directed) 1.50 Sq.mm 3 core round PVC sheathed	100	Mtr.	
27	Providing and erecting Miniature circuit breaker single pole 6A to 32A suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat.III	50	Nos.	
28	Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS: 8828 in existing box having following capacity (A) 40 Amp Cat III	3	Nos.	
29	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS:8828 in existing box having following capacity (a) 63 Amp Cat III	2	Nos.	
30	(b) 40 Amp. Cat.III	2	Nos.	
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31 F N S S L	Providing and erecting Sheet Steel bowder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, confirming to IS 13032 and BS 5486-1986 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) by Three phase 6 way (8 Way ncomer) SS Double door for single phase outgoing horizontal box	2	Nos.	
32 4 6	Providing and erecting Approved make ELCBs / RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 6 KA and suitable for operation on 3 phase and neutral 415V. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max. rating erected as directed	2	Nos.	
33 1 r s c c c c c c c c c c c c c c c c c c	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 25 KA. at 415 V, having normal current rating up to 25 A to 100A. with Fixed thermal & magnetic release suitable to work on A.C. supply 50 c/s. with all internal connections & complete erected in existing 16 G.M.S. housing. ICS=100% of ICU only Cat III	3	Nos.	
34 ii	Supplying & erecting approved make Four Pole 415V change over switch nterior for panel mounting with operating mechanism A.C.23 duty confirming to IS for (A)100-125A Cat III	1	Nos.	
35 iii 6 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	Supplying and erecting triple pole & neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each bar, erected in existing cubical panel with necessary connections. (A) Suitable for 100 Amp. Capacity	2	Rn.Mtr	
36 F	Providing and erecting Annealed pare Copper wire 8 to 16 SWG.	10	Kg.	

		INDIA		
37	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications.(b)For Electrical installation up to 11 KV in normal soil. Length of Pipe: 10 mtrs	3	Nos.	
38	Providing & erecting weather proof, dust & vermin proof, floor mounted front operated indoor type cubical panel board having IP-64 protection made from 14 SWG thick CRC M.S. sheet for outer body & doors, 16 SWG thick CRC M.S. sheet for internal partitions with necessary supporting angles, flats including cutting, bending, drilling, welding, riveting with internal partitions & cable alley as per requirements & instruction of engineer-in-charge with erection of supplied switch gears, BUSBARS, with suitable size of inter connecting PVC copper wire / copper-aluminium strips, rubber grommets, rib, bakelite control fuses for measuring instruments, earth bus & earth bolts, foundation flange -bolts-base Plates, sufficient nos. of hinged doors, handles with locking arrangement and rubber gasket complete. The Panel shall be painted with epoxy powder coating. (The rates excludes the cost of switchgears, bus bars, inter connecting mains & Copper Aluminium strips, meters, Fuses etc. The dimension shall be measured excluding base beams) The panel shall be supplied with following approved manufacturers with following size(A) The standard companies switch gear shall be used and only manufacturers at CPRI approved factory and shall be certified by that company whose switch gears are used after fabrication for beneficial use (i)	2	Sq.Mtr	

		INDIA		
39	Providing, erecting, fabricating the M.S. structure as per requirement on site incorporating proper size of M.S. angles, flats, bars, channels, sections complete with cutting, welding, grinding & finishing duly painted with one coat of red oxide with erection on site as per direction of engineer in charge with necessary grouting, cementing, plastering & finishing complete.	80	Kg.	
40	Supplying and erecting approved make panel mounting type Digital Voltmeter having 3 digits LED display, 0 to 750 AC Volts range erected on existing panel board with all connection, wiring etc .with manufacturers calibration certificate.	1	Nos.	
41	Supplying and erecting approved make panel mounting type Digital Ammeter having 3 digits LED display, external CT operated, calibrated for 0 to 1000 Amps suitable to operate on 500 Volt AC, erected on existing panel board with all connection, wiring etc .with manufacturers calibration	1	Nos.	
42	Supplying and erecting Ammeter / Voltmeter selector switch for 3 phase AC Supply 500 V on existing panel board with necessary connections.	2	Nos.	
43	Supplying and erecting approved make set of indicator lamps of LED type lamp, lens cover, Bakelite holder complete erected with necessary connections.	3	Nos.	
44	Providing and erecting XLPE(IS:7098) (I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (C) 3 1/2 core 25Sq. mm (16 Sq. mm 1/2 core)	100	Mtr.	
45	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete without going tails, insulating tape etc for following size of cables (C) 3 & 1/2 core 25 Sq mm	4	Nos.	
46	Solderless crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts	12	Nos.	

		INDIA			
	in an approved manner. (A) 25				
47	(B) 16 Sq.mm.	4	Nos.		
			1403.		
	Providing & laying approved make				
	Double walled corrugated pipes				
	(DWC) of polyethylene (conforming				
	to IS 14930 II) with necessary	=0			
48	connecting accessories of same	50	Mtr.		
	material at required depth for laying				
	of cable below ground / road				
	surface for enclosing cable and back				
	filling the same to make ground as				
	Providing & erecting Approved make				
	Power Saving 50-Watt Ceiling Fan				
	with double ball bearing ISI mark with				
	Condenser 230-volt A.C. 50 Hz				
49	1200 mm sweep complete having	43	Nos.		
	3blades with aluminium blades with ,	70	1403.		
	canopy & 30 cms. down rod erected				
	with 24/ 0.2, 3 core flexible wire with				
	earthing. (Make shall be approved by				
	Engineer in charge))				
50	Supplying and erecting 19 / 20 mm.	43	Mtr.		
	nominal bore Medium Class				
	M.S. Pipe down rod erected duly				
	painted for fan complete with				
	necessary 24/ O.20, 3 core flexible				
	wire with earthing.				
	Supplying & erecting fan hook box of				
	10 mm M.S. round bar bounded to				
	the RCC bars up to 50mm length				
51	each side and pierced through a 16	43	Nos.		
	Gauge M.S. box / Heavy Duty PVC				
	box complete erected concealed in				
	Ceiling with necessary finishing.				
52	Providing 2. 5mm.thick laminated	43	Ea.		
	acrylic sheet to cover the fan				
	hook or Fan box.				<u> </u>
53	Supplying & erecting approved make	23	Nos.		
	low noise decorative exhaust fan				
	having size 200mm with 1350 RPM				
	with square				
	frame ABS body with inbuilt lowers &				
	square frame.				
54	Providing suitable M.S. louver shutter	23	Nos.		
	of the Exhaust				
	fan.				
	Providing recess in wall or window				
	frame suitable for erection of Exhaust				
	fan complete with plastering and				
	colour washing to match the colour of	00	Na -		
55	the wall or window complete with	23	Nos.		
	expanded metal in order to render				
	the fitting in accessible and the room				
	water-				
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	proof.				
	Supplying and erecting approved make Bracket fan of 230 volt, A.C. 50				
	Cy/s., 400/450 mm sweep complete				
56	erected on wall or with lead Cores	17	Nos.		
	and connections				
	complete Cat.III				
	Providing and fixing of LED Tube				
	Fitting (Batten) fixing				
	arrangement as required shall have				
	the following specifications				
	Dimensions-4 Feet, Power				
	Consumption including driver loss- 16W to 20W, No. of LED-Depending				
	upon total power consumption and				
	illuminance, Luminous Efficacy of the				
	system- above 90 lm/w, Colour-				
	Natural White/Cool White, Lamp				
	Type-LED light including patti, Fixture				
	Material-Heat Sink Aluminium				
	Extrusion, Diffuser – Polycarbonate,	-			
57	Input Voltage Range & Frequency-	35	Nos		
	130 – 290 VAC, 50 Hz, Power Factor-Greater than 0.9, Beam				
	Angle-100 — 120 deg., Mounting				
	Type-Ceiling , CRI-Greater than 80,				
	Rated lamp life -Min. 30,000 to				
	40,000 Hrs, Heat Dissipation-				
	Suitable arrangement having low				
	LED driving current, Illuminance-60				
	to 80 lux at 10 ft height, IP Rating -IP				
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	(whole), Diffuser- Glare free				
	20, Protection-Voltage surge protection and thermal cutoff protection, Approved make of LED: Nichia, Osram, Samsung or Equivalent, Warranty Five years				

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58	Providing and fixing of 600 mm x 600 mm LED Panel Light Slim (Armstrong) or Surface Series or equivalent of 32 to 36 W with No. of LED-Depending upon total power consumption and illuminance, Luminous Efficacy of the system-Above 90 lm/w, Color-Natural White/Cool White, Lamp Type-LED Ceiling light, Fixture Material-Powder coated CRCA sheet, Input Voltage Range & Frequency-150 – 290 VAC, 50 Hz, Power Factor-Greater than 0.9, Beam Angle-100 – 120 deg., Mounting Type-Ceiling, CRI-Greater than 80, Rated lamp life-Min. 25,000 Hrs, Heat Dissipation-Suitable arrangement having low LED driving current, Illuminance-350- 400 Lux at 6 ft height, IP Rating-IP 20, Protection-Voltage surge protection and thermal cutoff protection, Approved make of LED-Nichia, Osram, Samsung or Equivalent, Warranty-Five years (whole), Diffuser-Glare free full opal.	120	Nos	
59	Providing and fixing of step light	0	Nos.	
	having fibre reinforced plastic housing,5 watt direct/indirect luminaire, Cat-III		1403.	
60	Providing and fixing of mirror light, 5 watt LED lights	10	Nos.	
61	Providing and erecting water cooler having storage capacity 80Ltr. & cooling capacity 40 Ltr.per hour @ an ambient temp of 450 C. The outlet temp. of the water should drop by 150 C within a hour, The water cooler should be comprising of hermetically sealed compressor, fan motor, condensing unit, water tank surrounded by evaporating coil, thermostats, relay etc. complete with necessary inlet & outlet connection. The body of water cooler will be made from Stainless Steel.	0	Ea.	
62	Supplying & erecting 5 stage single reverse osmosis water purification system with M.S. powder coated frame, prefilter housing with 'O' ring presediment filter GAC filter, carbon filter suitable buster DC pump capacity 80 psi, mention with 40 Osg inline type post carbon filter auto low & high pressure switches with following size of storage tank & LPH	0	Ea.	

		INDIA		
	capacity & erected as directed with one year comprehensive maintenance guarantee.[C] 50 Ltr / Hr with 250 psi 2 nos booster pump			
64	Extra charges for the Items beyond standard length For Single phase Split A.C. Machine insulated pair of soft, copper tubing including power and control cable up to 2 TR capacity	0	Rmt	
65	Supplying & erecting carbon dioxide (CO2) fire extinguisher user of following capacity with necessary clamps made from 50 x 6 mm M.S. Flat with nut & bolts grouted in wall complete. [A] For 4 5 Kg Capacity	0	Ea.	
66	Supplying & erecting ABC powder type 'Ceasefire' type Fire extinguisher as per IS 13849 or 1 Kg capacity with necessary clamp for erection on wall	0	Ea.	
67	Supplying & erecting push button type telephone instrument having speaker phone Caller ID & hands free dialling system & 30 memories with display system (a) Single line BPL / SONY/ BEETEL or equivalent make	0	EA	
68	providing and fixing of instant water Heater(Geysers) inclusive inlet & outlet water connections flexible piping of 3 litre Capacity.	0	EA	
69	Providing and fixing of LED Flood light fitting as per requirement 70 to 100 W with No. of LED-Depending upon total power consumption and illuminance, Luminous Efficacy of the system-Above 90 Im/w, Color-Cool White, Lamp Type-flood light, Fixture Material-die cast aluminium heat sink housing, transparent toughened glass of minimum 2 mm thickness, Input Voltage Range & Frequency-130—290 VAC, 50 Hz, Power Factor-Greater than 0.9, Beam Angle-90—110 deg., Mounting Type-outdoor, CRI- Greater than 80, Rated lamp life-Min. 25,000 Hrs, Heat Dissipation-Suitable arrangement having die cast aluminium housing, Illuminance-150 Lux height of 10 Mtr height, IP Rating- IP 65, Protection-	9	No	

CONSTRUCTION OF BARODA SWAROJGAR VIKAS SANSTHAN (RSETI) BUILDING AT AHWA, DISTRICT DANG, GUJARAT, INDIA

Voltage surge protection and thermal cutoff protection, Approved make of LED-Nichia, Osram, Samsung or Equivalent, Warranty-Five years (whole), the work complete with necessary MS clamping, wiring etc. as directed by EIC/Architect.		
Amount (Rs.)		
Applicable GST (Rs.)		
Total Amount (Rs.)		